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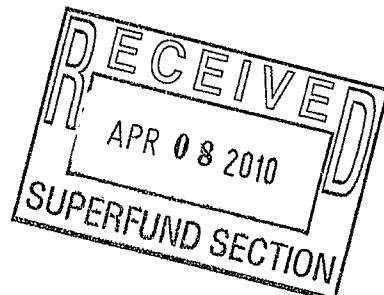
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**SEMI-ANNUAL
GROUNDWATER MONITORING REPORT
June through December 2009**

Former Nello Teer Quarry
5013 Denfield Street
Durham, North Carolina

**NCDENR INCIDENT # 9357
HES Project #57001**

Date of Report:
February 22, 2010



Prepared for:

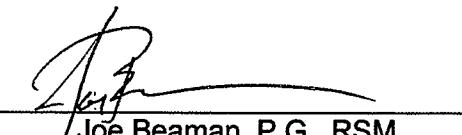


Hanson Aggregates North America
8505 Freeport Parkway
Irving, Texas 75063

Report Prepared by:
Highlands Environmental Solutions, Inc.
8410-D Falls of Neuse Road
Raleigh, NC 27615
(919) 848-3155



Tyrel DeShong
Environmental Scientist



Joe Beaman, P.G., RSM
Principal Geologist



Kirby, Wade

From: Joe Beaman [JBeaman@hesnc.com]
Sent: Wednesday, April 07, 2010 3:07 PM
To: Kirby, Wade
Cc: Walch, John
Subject: RE: Former Nello Teer Quarry, Durham, Durham Co - NONCD 0002873

Mr. Kirby,

I will hand deliver a copy of the latest report tomorrow. It is quite large (in a three ring binder), mostly due to the size of the appendices. Would you prefer an electronic copy of this document?

Currently, we are working on this site through the NCDENR – UST Section. Additional assessment activities are planned for the site, and we are currently preparing LUST Fund Pre-Approval Documents for these additional assessment activities. The proposed activities include the addition of surface water samples from the quarry pool to the on-going monitoring program. Apparently, the City of Durham is currently using the quarry as a water reserve, although our calls to the County to formally confirm this have not been returned. However, given the volume of the existing pool and the relatively low concentrations of residual regulated constituents in groundwater within our study area, I would not expect to find detectable concentrations of regulated chemical constituents (from the subject study area) in the water in the quarry pool, IF impacted groundwater is contributing to the quarry pool.

Please contact me with any questions or concerns.

Joe

From: Kirby, Wade [mailto:wade.kirby@ncdenr.gov]
Sent: Wednesday, April 07, 2010 2:50 PM
To: Joe Beaman
Cc: Walch, John
Subject: Former Nello Teer Quarry, Durham, Durham Co - NONCD 0002873

April 7, 2010

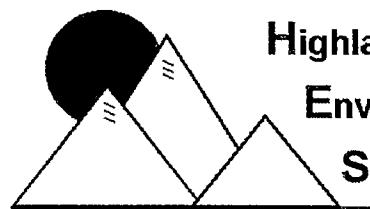
Mr. Beaman,

Thank you for sending the Site Clean-up Questionnaire on behalf of Lehigh Hanson, Inc for the subject site. Apparently, the IHSB has not been getting the Groundwater Monitoring reports for this site. The last one in our files is dated January 17, 2006. Per the questionnaire, I understand the most recent sampling event was in December 2009. Would it be possible to get the missing groundwater monitoring reports and the ones thereafter?

We are in the process of evaluating whether this site can go into the REC program and the reports will help in this decision. Of course if the City of Durham is intending to use the quarry for a water reserve, we are concerned of potential impact from site contamination.

Thank you,

*Stephen Wade Kirby, PE, PG
Environmental Engineer II
Inactive Hazardous Sites Branch
Superfund Section
NC Division of Waste Management
(919) 508-8469*



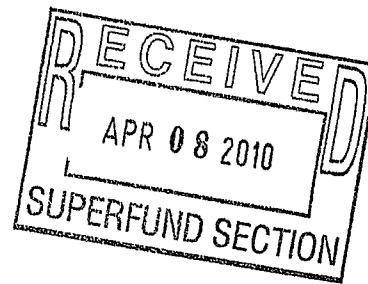
**Highlands
Environmental
Solutions, Inc.**

8410-D Falls of Neuse Road; Raleigh, NC 27615
Phone: 919-848-3155 / Fax: 919-848-4265 / www.hesnc.com

February 22, 2010

Mr. Mark Powers
NCDENR – Raleigh Regional Office
1628 Mail Service Center
Raleigh, NC 27699-1628

Subject: Submittal of Groundwater Monitoring Report
Former Nello Teer Quarry; Durham County
NCDENR Incident #9357
HES Project #57001



Dear Mr. Powers:

On behalf of our client, Hanson Aggregates (Hanson), Highlands Environmental Solutions, Inc. (HES) hereby submits the enclosed Groundwater Monitoring Report for the above referenced site. Groundwater samples were collected from the site on December 15, 2009 and December 16, 2009, and dissolved phase petroleum hydrocarbons were detected in several groundwater samples. In addition to the groundwater samples, seventeen soil borings were advanced in the vicinity of the former gas station area on December 14, 2009. Both the active remediation systems (groundwater treatment and SVE systems) at the site are currently off-line, and will require extensive upgrades/repairs if reactivated. Based on the concentrations of dissolved phase chemical constituents detected in the December 2009 groundwater monitoring activities, we do not recommend reactivating the remediation systems at this time. We have made recommendations for installing additional monitoring wells at the site, and establishing a permanent sampling point in the former quarry pit. These recommendations are included in the enclosed report.

If there are any questions regarding this submittal, or the project in general, please contact Joe Beaman at (919) 848-3155, ext. 21.

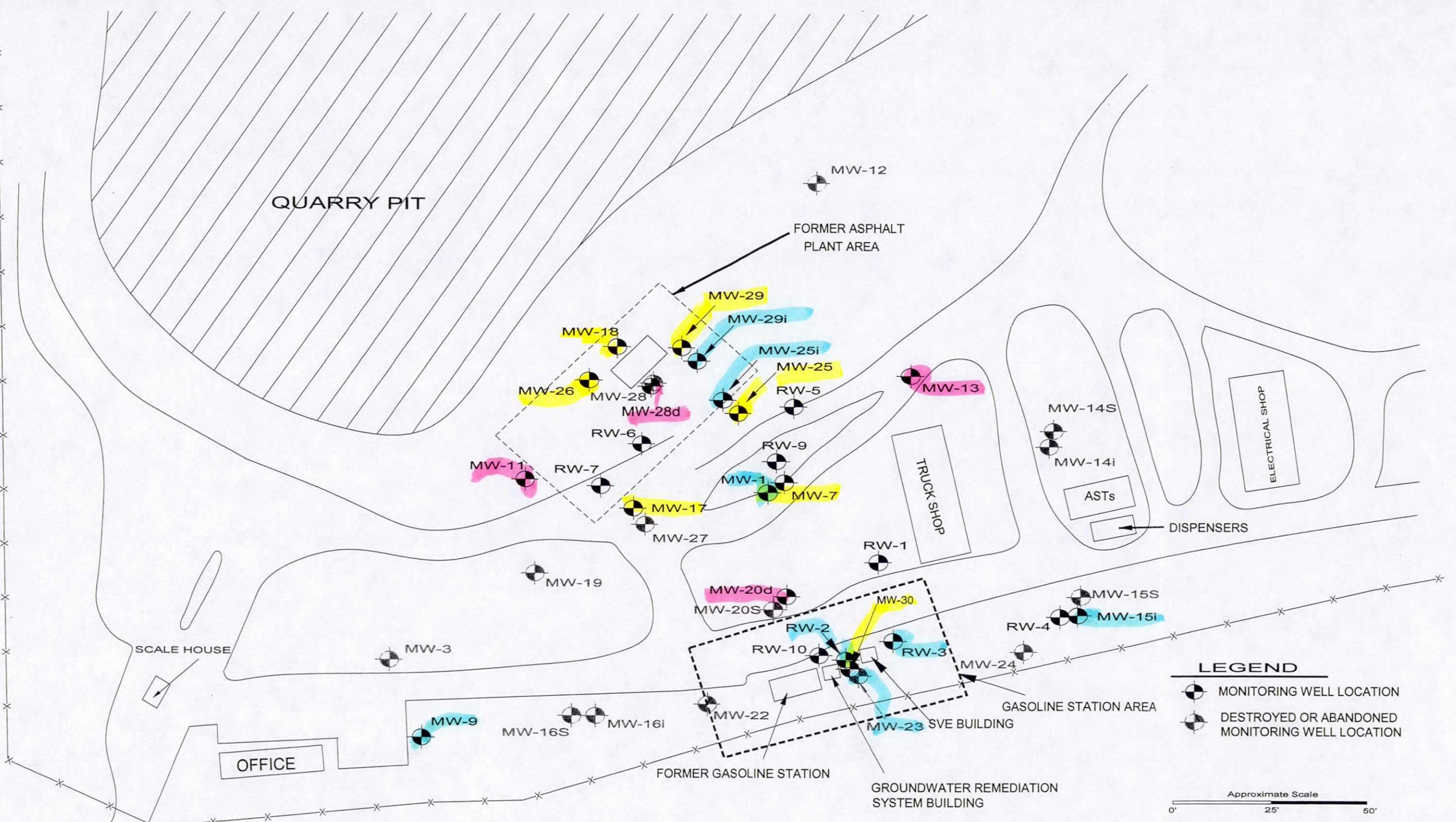
Sincerely,

Highlands Environmental Solutions, Inc.

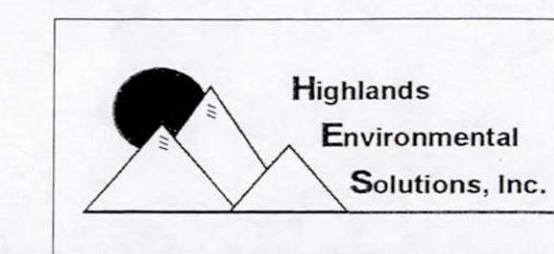
Joe Beaman, P.G.
Principal Geologist

Attachment

cc: Mr. Steve Edgerton – Hanson Aggregates North America



Shallow
Intermediate
Deep



PG	PE	Drawing Title
JB		
DB	PM	
WF	JB	
Project #		
57001		
Date		
Dec 2009		
Scale		
AS SHOWN		

Site Detail Diagram

Former Nello Teer Quarry
5013 Denfield Street; Durham, North Carolina
Hanson Aggregates of North America
Irving, Texas

**SEMI-ANNUAL
GROUNDWATER MONITORING REPORT
June through December 2009**

**Former Nello Teer Quarry
5013 Denfield Street
Durham, North Carolina
Groundwater Incident No. 9357**

Facility ID #0-012984

HES Project #57001

Date of Report: February 22, 2010

Site Priority Ranking: 110B

Responsible Party: Nello Teer Company
5013 Denfield Street
Durham, NC 27560
(919) 477-2413

Property Owner: Hanson Aggregates North America
8505 Freeport Parkway
Irving, Texas 75063
(972) 621-0345

Consultant: Highlands Environmental Solutions, Inc.
8410-D Falls of Neuse
Raleigh, NC 27615
(919) 848-3155

Contact: Joe Beaman, P.G., RSM

Date of Release: October 2, 1992

Quantity of Release: Unknown

Material Released: Failure of UST System

Cause of Release: Soil and groundwater impacts by petroleum hydrocarbons appear to have originated from gasoline, diesel, and used oil underground storage tanks located at a former gas station on-site. Additional groundwater impacts, by chlorinated hydrocarbons, appears to have originated at and around a former asphalt plant located on the property.

Latitude/Longitude of Release:

36° 3.04' N / 78° 53.35' W


Joe Beaman, P.G., RSM
Principal Geologist
NC Licensed Geologist #1468

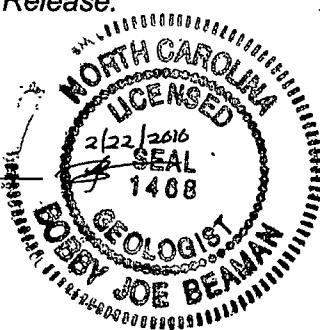


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1.0 SITE HISTORY

Highlands Environmental Solutions, Inc. (HES) completed environmental sampling events at the former Nello Teer Quarry on Denfield Street in Durham, North Carolina as follows:

- 2006: December
- 2007: July and November
- 2008: August and November
- 2009: May
- 2009: December

These sampling events were performed in general accordance with the Corrective Action Plans (CAPs) submitted to the NC Department of Environment and Natural Resources (NCDENR) by Front Royal Environmental Services in 1995, and by Quantum Environmental (Quantum, formerly Front Royal) in 2005. The CAPs detail the remedial activities for a petroleum hydrocarbon plume associated with a former gas station at the site, and with a chlorinated solvent plume associated with a former asphalt plant at the site. HES assumed project management for the site from Quantum in October, 2006. During the December-2009 event, HES conducted limited soil sampling activities, and installed an additional monitoring well at the site. This report details sampling methodology, analytical results, and site conditions.

1.1 Background

The former Nello Teer Quarry is an inactive crushed stone mining and processing facility located at the end of Denfield Street (SR 1641) in Durham County (**Figure 1** and **Figure 2**, included in **Appendix A**). The site operated as a quarry from the 1940's into the 1980's. A gasoline station, with underground petroleum storage tanks, was located along the perimeter of the property south of the quarry pit. An asphalt plant, with a North Carolina Department of Transportation (NCDOT) testing laboratory, operated adjacent to the south side of the quarry pit (**Figure 3**). Quarrying activities are not currently occurring; however, a crushed stone sales yard is operational on the north side of the quarry pit.

In 1993 groundwater impacted by petroleum hydrocarbons was discovered in a site water supply well and the NCDENR issued a Notice of Violation. A subsequent receptor survey was performed with other water supply wells were identified within 1/4 mile of the facility, however, none were found to be impacted by regulated chemical constituents from the site.

Environmental assessment activities were performed to delineate petroleum hydrocarbon plumes in the soil and groundwater originating from the underground storage tanks at the former gas station. An additional groundwater concern was identified when chlorinated solvents were discovered originating from the NCDOT testing laboratory. Front Royal Environmental Services submitted a revised CAP in 1995, and Quantum performed recommended soil remediation and installation of the groundwater remediation system by the end of 1997. Quantum also identified the groundwater concerns occurring in two groundwater zones at site. These zones are defined as a shallow (unconfined) zone and a deeper (confined) zone. **Figure 3** indicates the location of existing monitor wells and several recovery wells on the property.

In 2003, Quantum performed a pilot study for utilizing Hydrogen Release Compound (HRC[®]) to address the chlorinated solvent plume. Additionally in 2005, Quantum installed a series of soil vapor extraction (SVE) wells, an SVE system near the former gas station, and submitted a CAP Addendum recommending natural attenuation for residual soil and groundwater contamination at the site.

HIGHLANDS ENVIRONMENTAL SOLUTIONS, INC. (HES) began working on the project in October 2006. HES determined that the groundwater remediation system was recovering groundwater from only one of the recovery wells (RW-3), and that the system particle filters were clogged. Furthermore, the remediation system was in need of extensive cleaning and repairs. The SVE system appeared to be operating as designed; however, this system has been subsequently taken off line due to damaged vacuum blowers.

This report represents monitoring and assessment activities performed in December 2009.

1.2 Site Geology

The site is located on the western edge of the Durham Triassic Basin near an extension of the Nutbush Creek Fault line which separates the Triassic sediments from the felsic meta-volcanic rocks of the Carolina Slate Belt. The fault line is visible in the southeast wall of the quarry adjacent to the site. While the quarry was active, Nello Teer Company was mining the meta-volcanic rocks and a diabase sill which intrudes the area. The two areas of concern at the site lie completely within the Triassic basin sediments, with localized diabase sills and dikes intruding the site. The Nutbush Creek Fault is dipping steeply ($\approx 60^\circ$) toward the southeast (Front Royal - Comprehensive Site Assessment, 1993).

The Triassic sediments consist of inter-layered mudstone, siltstone, and sandstone of the Chatham Group. The sediments are partially indurated with iron oxide, silica, and rarely, calcium carbonate cement. The shallow zone sediments extending from just east of the office and scale-house, to the former asphalt plant area and the truck shop area consist mainly of fill material derived from the sedimentation ponds formerly located there during the earlier operation of the quarry. The area along the northeast trending line from MW-1 to MW-13 is the location of a former drainage feature, which flowed to the wetlands along the horseshoe bend in the Eno River, east of the quarry. This drainage feature has been infilled, but appears to at least partially control groundwater flow in the surficial aquifer. The Eno River flows in a generally easterly direction and is located to the north/northeast of the quarry and the site locations. Surface topography slopes generally downward to the east/northeast.

2.0 DISCUSSION OF FIELD INVESTIGATION

Personnel from HES mobilized to the site on December 14, 2009, to conduct environmental assessment activities. Assessment activities included: Limited soil sampling, monitoring well installation, and groundwater sampling. Additional information regarding these activities is included in this section.

2.1 Soil Assessment Activities

During assessment activities performed by HES, soil samples were collected around the former gas station area to define the lateral extent of residual petroleum-impacted soil. Soil borings were advanced in this area using a Geoprobe (i.e. direct-push) drilling rig equipped with five five-foot long MacroCore soil samplers. The MacroCore samplers were equipped with acetate sampling sleeves, which were changed between sample intervals. At each soil boring location, continuous soil samples were collected from the ground surface to maximum depths of 10 feet below grade. Upon retrieval, the sampling sleeve was opened and the soil sample was examined for evidence of soil impact (i.e. staining, odor, etc.) by regulated chemical constituents. A soil sample was then collected along the length of the sampling sleeve, and divided into two aliquots. The first aliquot was placed in a labeled, laboratory supplied container, and maintained on ice pending selection for laboratory analysis. The second aliquot was placed in a clean, labeled, zip-lock bag that was sealed and placed in direct sunlight to equilibrate for approximately 10 minutes. At the end of the equilibration period, the headspace in the sample bag was then field screened for the presence of organic vapors using a photoionization detector (PID). To field screen the headspace, the sample probe for the field screening instrument was inserted into the headspace in the bag, and the approximate concentration of organic vapors in headspace was displayed on the field unit.

Based on PID screening data, 15 soil samples were submitted for laboratory analysis. Samples selected for laboratory analysis were maintained on ice and shipped (via courier) to Accutest Laboratories for laboratory analysis of: Volatile organic compounds (VOCs), by Method 8260; Semi-volatile organic compounds (SVOCs), by Method 8270; and total lead, by Method 3030c.

Laboratory analytical data for the soil samples are summarized on **Tables 1, 2, and 3** and discussed further in **Section 3**. The location of the soil borings are presented in **Figure 6**.

2.2 Monitoring Well Installation and Site Survey

One EPA Type II groundwater monitoring well (MW-30) was installed at the site in December 2009 as part of the groundwater investigation. The location of the groundwater monitoring well is depicted on **Figure 3**. The well was installed by hollow-stem augers, and was constructed of Schedule 40 PVC well casing (from 0 to 4 feet below ground surface) and manufactured well screen (from 4 to 19 feet below ground surface) for a total depth of 19 feet below ground surface. The wellhead was completed with a locking cap; steel, flush-mount, protective cover and concrete pad. Additional details regarding well construction are presented on **Table 4**.

Following completion of well construction, the depth to liquid level was determined using an electronic oil-water interface probe, and the well was developed by bailing using dedicated, disposable, polyethylene bailers and nylon line. The bailing process was repeated until a minimum five well volumes had been removed, or the well was purged dry four times. All liquids recovered during well development were visually examined for the presence of free-product and/or hydrocarbon sheens. Neither free-product nor hydrocarbon sheens were observed in water recovered during bailing activities. As such, all liquids generated during well development were discharged to paved areas on the property.

Upon completion of monitoring well installation activities, the location of the monitoring well was horizontally referenced to landmarks established at the site. The vertical elevation of the ground surface and top of casing at the monitoring well was measured and referenced to the top of casing of a nearby monitoring well (MW-20D).

2.3 Water Table Measurement and Groundwater Flow Direction

Prior to collecting groundwater samples, HES personnel measured water levels in all accessible monitor wells. Before water levels were measured, all well plugs and caps were removed to allow water levels to equilibrate to static conditions for a minimum 15 minutes. Water levels were measured from the top of casing using an electronic water level meter. The water level meter was thoroughly decontaminated between each well; and new, non-reactive gloves were worn for each measurement. Measurements were recorded with an accuracy of +/- 0.01 feet. Measured water levels are presented in **Table 4**. Also reported are well depths, wellhead

elevations, groundwater elevations related to mean sea level, and purge volumes. Wellhead elevations and other well data were obtained from previous reports prepared by Quantum. Some of the wellheads have been damaged; therefore actual well head elevations may vary slightly from the elevations reported.

During water level measurements, free-product was not detected in the monitoring wells. Depth to water data was combined with well elevation data to determine the water table elevation at each well.

As previously noted, three groundwater zones are present beneath the site. The groundwater flow directions are described below:

- Groundwater flow in the *shallow zone (surficial aquifer)* is toward the East-Southeast, away from the quarry pit. This flow is influenced by the pre-development topography of the site, and is towards a former drainage feature that once transected the site. Graphical representations of the water table surface for the surficial aquifer for the most recent monitoring events are presented on **Figure 4A**.
- Groundwater flow in the *intermediate zone* is towards the West-Northwest. This flow is influenced by the fault fractured rocks separating the meta-volcanic rocks in the quarry pit from Triassic sediments at the area of concern. It is reasonable to conclude that the intermediate zone may be connected to the overlying surficial aquifer. Graphical representations of the potentiometric surface for this zone during the most recent monitoring events are presented on **Figure 5B**.
- Groundwater flow in the *deep zone* is toward the West-Northwest. This zone appears to be influenced by the water level in the quarry pit and fractures in the competent bedrock. Graphical representations of the potentiometric surface of this zone for the most recent monitoring events are presented on **Figure 5C**.

2.4 Groundwater Assessment Activities

A review of well data and water levels from this and previous reports indicates that three aquifer zones being studied on the subject property, rather than the two previously reported by Quantum. HES report groups the monitor wells into zones as follows:

- **Shallow zone** with 7 wells (MW-7, MW-17, MW-18, MW-25, MW-26, MW-29, and MW-30),
- **Intermediate zone** with 6 wells (MW-1, MW-9, MW-15i, MW-23, MW-25i, MW-29i, RW-2, RW-3)
- **Deep zone** with 4 wells (MW-11, MW-13, MW-20d, and MW-28d).

The monitor wells to be sampled were purged of at least three well volumes (or until dry) using either new disposable PVC bailers and new nylon cord, or using a stainless steel Grundfos® submersible sampling pump with new vinyl tubing. The Grundfos® pump was thoroughly decontaminated between wells, and new sampling tubing was used for each well. During the December 2009 groundwater sampling event, groundwater samples were collected from the following monitor wells:

- **Shallow zone:** MW-7, MW-17, MW-18, MW-25, MW-26, MW-29, MW-30
- **Intermediate zone:** MW-1, MW-9, MW-15i, MW-23, MW-25i, MW-29i, RW-2, RW-3
- **Deep zone:** MW-11, MW-13, MW-20d, MW-28d

Samples were placed into laboratory supplied and prepared sample bottles, maintained on ice, and transported by courier under chain of custody protocol to Accutest, a NC certified analytical laboratory. Samples were analyzed for volatile hydrocarbons by EPA method 6210D, and for semi-volatile hydrocarbons by EPA method 625.

3.0 DISCUSSION OF EVENT FINDINGS

3.1 Soil Sampling Results

As noted earlier, 15 soil samples were submitted for laboratory analysis of VOCs, SVOCs; and total lead. Concentrations of VOCs in soil samples GP-3B and GP-6A exceeded Soil to Groundwater MSCCs as follows.

- Constituents in soil sample GP-3B that exceeded Soil to Groundwater MSCC are ethylbenzene, methylene chloride, naphthalene, and n-propyl benzene. Naphthalene concentrations in soil sample GP-6A exceeded Soil to Groundwater MSCC. Naphthalene concentrations were detected in soil sample GP-3B at 0.635 mg/Kg that exceeded Soil to Groundwater MSCC. All other soil

- samples did not exceed SVOC concentrations above Soil to Groundwater MSCC.
- Metals were not detected in concentrations that exceeded Soil to Groundwater MSCC in any of the soil samples collected in the area of the former gas station.
- Concentrations did not exceed Residential MSCC or Industrial/Commercial MSCC.

Laboratory analytical data for soil samples collected during the investigation are shown on **Table 1**, **Table 2**, and **Table 3**. A copy of the complete laboratory analytical data report is included in **Appendix C**. Locations of soil samples are shown as **Figure 6**.

3.2 Groundwater Sampling Results

Site history indicates there are two areas of concern on the property:

- The former gas station area; and
- The former asphalt plant area.

Sampling results from each area of concern are discussed separately in this report. Monitoring well MW-9 represents the up-gradient, background well, and MW-1, MW-7, and MW-13 are located between the two areas of concern. Laboratory analysis results for groundwater samples are summarized in **Table 2**. Copies of complete laboratory analytical reports and Chain of Custody are included in **Appendix C**.

3.2.1 Former Gas Station Area

Shallow zone samples collected from the former gas station area include monitor well MW-30. Other shallow wells previously located in this area have been either abandoned or destroyed during the installation of site remediation systems or other site activities. Laboratory analysis of the groundwater sample indicated an exceedance of NCDENR 2L standard for benzene (3.6 ug/L) during the December 2009 groundwater sampling event.

Intermediate zone samples collected from the former gas station area included monitor well MW-15i, and recovery wells RW-2 and RW-3. Laboratory analysis of a groundwater sample collected from MW-15i did not indicate an exceedance of NCDENR 2L standards for analyzed target compounds.

Deep zone samples collected from the former gas station area consisted of a sample collected from monitor well MW-20D. Laboratory analysis of groundwater collected from this well this indicated an exceedance of the NCDENR 2L Standard for vinyl chloride (2.40 ug/L) during the December 2009 groundwater sampling event.

A summary of laboratory analysis results for this zone are found in **Table 5**.

3.2.2 Former Asphalt Plant Area

Shallow zone samples collected from the former asphalt plant area included monitor wells MW-7, MW-17, MW-18, MW-25, MW-26, and MW-29. Laboratory analysis of groundwater samples collected from monitoring wells MW-7, MW-17, MW-18, MW-25, MW-26, and MW-29 did not indicate in an exceedance of NCDENR 2L standards during the December 2009 groundwater sampling event.

Intermediate zone samples collected from the former asphalt plant area included monitor wells MW-1, MW-25i, and MW-29i. Laboratory analysis of groundwater samples collected from these monitoring wells indicated an exceedance of NCDENR 2L Standards as follows:

- In MW-25i
 - Vinyl Chloride at 21.5 ug/L
 - 1,1-Dichloroethane at 22.1 ug/L
- In MW-29i
 - Vinyl Chloride at 1.9 ug/L

Deep zone samples collected from the former asphalt plant area included monitor wells MW-11, MW-13, and MW-28d. Laboratory analysis of groundwater samples collected from these monitoring wells indicated an exceedance of NCDENR 2L Standards as follows:for vinyl chloride in monitoring well MW-28D (0.58 ug/L).

- In MW-20D
 - Vinyl Chloride at 2.4 ug/L
 - 1,1-Dichloroethane at 0.53 ug/L
- In MW-28D
 - Vinyl Chloride at 0.58 ug/L

A summary of laboratory analysis results for this zone are found in **Table 5**. A graphical representation of the data collected during the monitoring events is presented on **Figure 5A, 5B, and 5C**.

4.0 REMEDIATION SYSTEM SUMMARY

The remediation system did not operate during the subject period.

5.0 WATER SUPPLY WELLS

Five water supply wells have been identified within 1500 feet radius of the source area. Well owners have been notified, and polled as to willingness to have their wells properly abandoned and the property switched over to municipal water supply. Of the well owners notified, all have expressed a willingness to be connected to municipal water and have their water supply wells closed. A list of identified water supply well owners is included as **Table 6**. A figure showing the location of identified water supply wells is included as **Figure 7**.

6.0 SUMMARY AND RECOMMENDATIONS

Based on the results of the most recent site assessment activities, as well as historic activities, HES concludes that areas of residual impacted soil and groundwater remain at the site. The impacted areas are divided into two areas: A former gasoline station; and a former asphalt plant.

Several water supply wells have been identified within 1500 feet of the site, and well owners have indicated their willingness to be connected to public water. Abandonment of these well would normally allow for a reduction of the risk ranking of this incident. However, because the former quarry pit is now utilized as a public water source, risk reduction is not possible.

Based on the results of this and previous environmental assessment activities at the site, HES recommends the following:

- The classification of land use of the site should remain "Industrial/Commercial";
- Additional monitoring wells should be installed in the shallow zone near the former gasoline station. The purpose of the additional monitoring wells is to further define the groundwater flow direction and lateral extent of petroleum impacted groundwater in this area;
- A quasi permanent sampling point should be established in the former quarry pit. The vertical elevation of this point should be surveyed so that the water surface elevation in the former pit may be compared to water level data for the monitoring well network at the site. Additionally, water sampling of the former quarry pit should be incorporated into the site monitoring program; and,
- The groundwater monitoring program should be reviewed to determine if the number of groundwater samples and/or analytical methods could be modified to increase project efficiency, and reduce project costs.

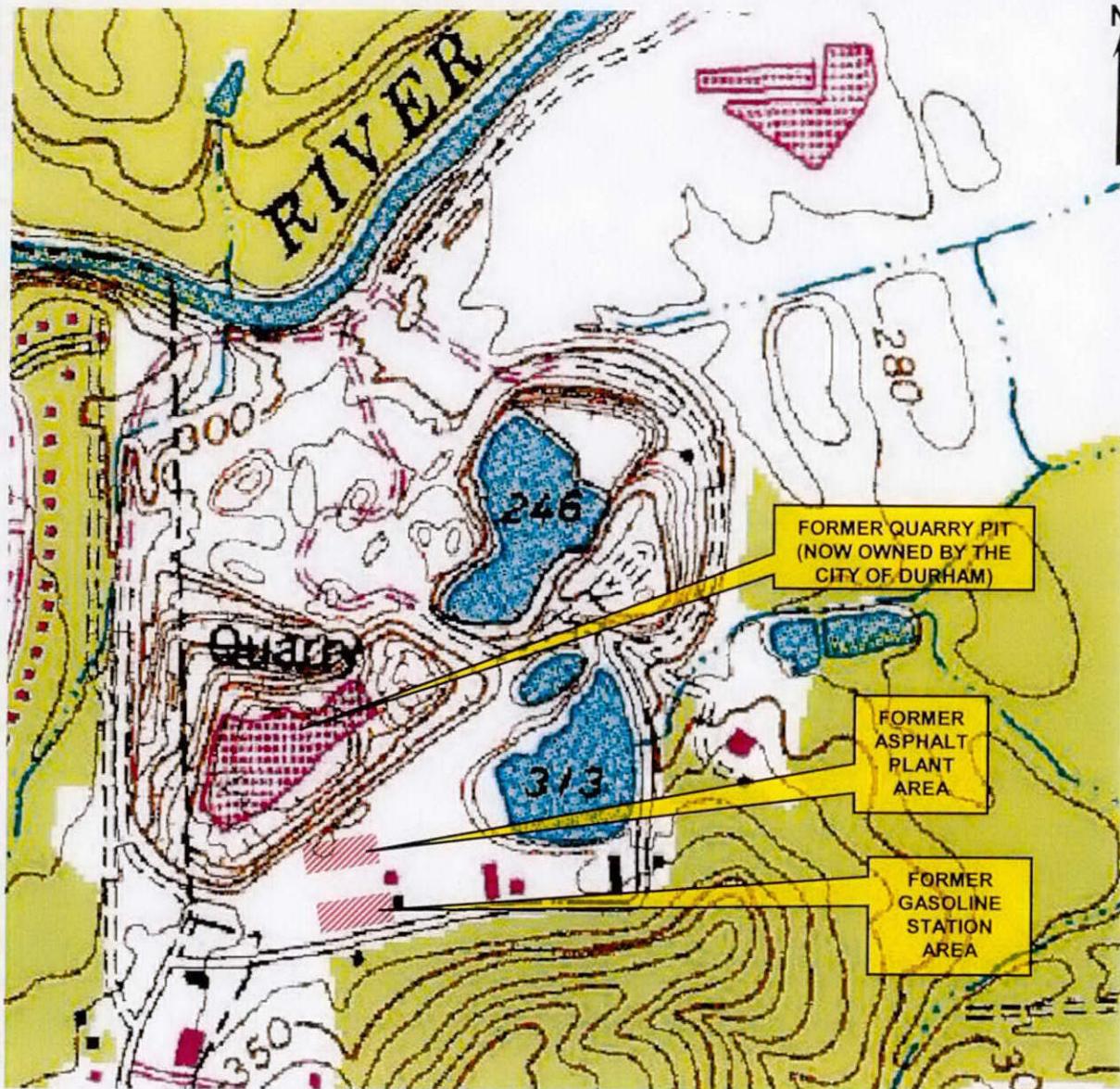
APPENDIX A
Figures



From MAPQUEST

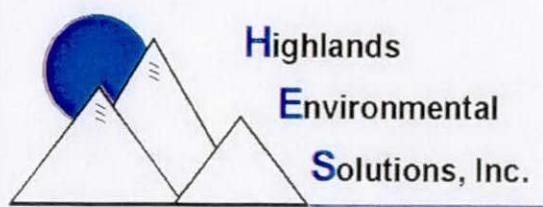
Site Location Diagram

 <p>Highlands Environmental Solutions, Inc.</p>	Project Name: Former Nello Teer Quarry 5013 Denfield Street, Durham, North Carolina		
	Client: Hanson Aggregates of North America Irving, Texas		
	Project Number: 57001		Drawn by: TD
	Scale: As Shown	Date: Dec 7, 2007	Figure Number: 1



From USGS 7.5 min
Topographic Quadrangle; Durham, NC

Topographic Location Diagram

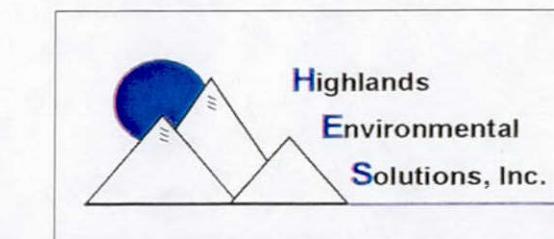
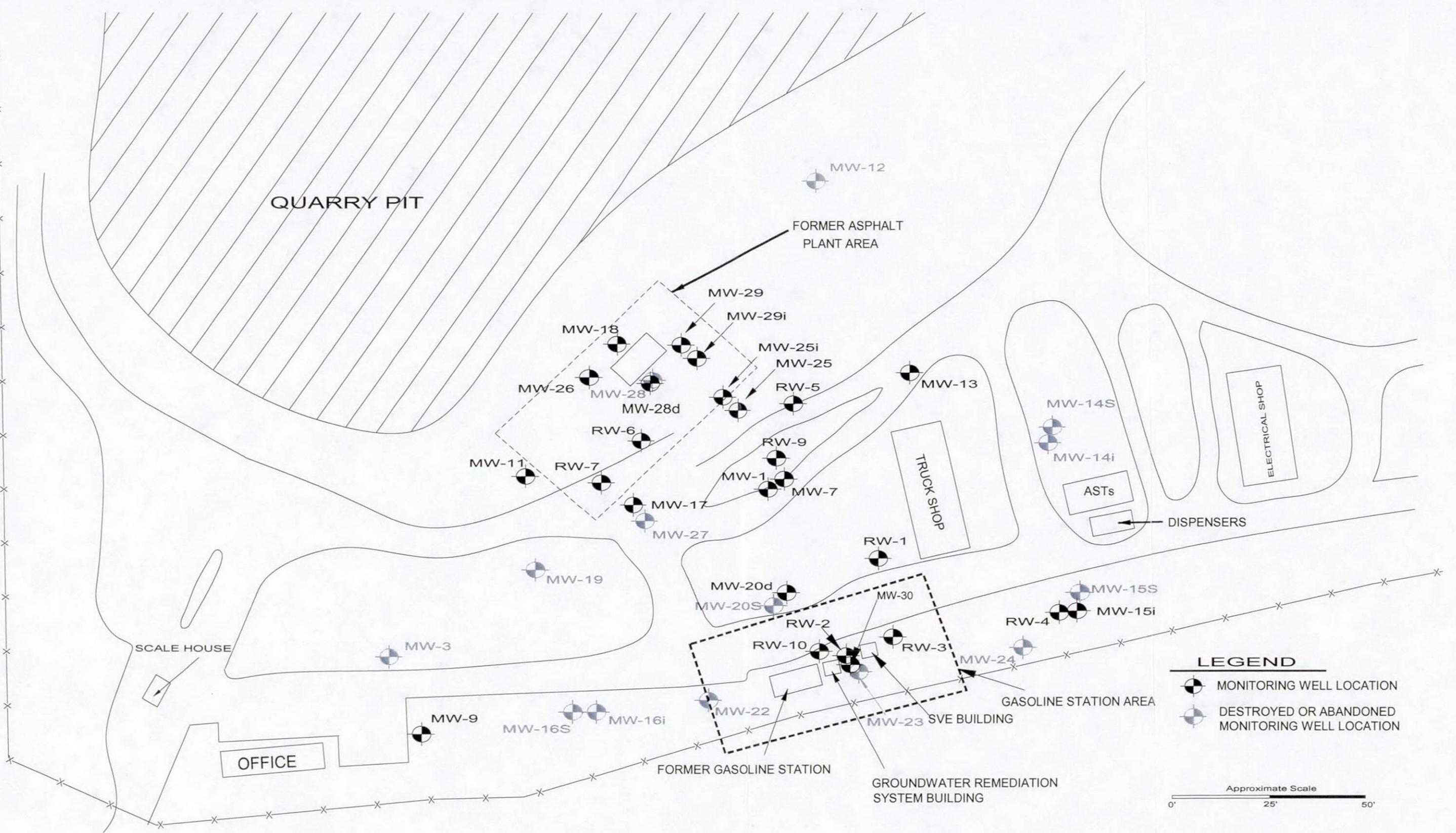


Project Name:
Former Nello Teer Quarry
5013 Denfield Street, Durham, North Carolina

Client: **Hanson Aggregates of North America**
Irving, Texas

Project Number:	57001	Drawn by:	JB
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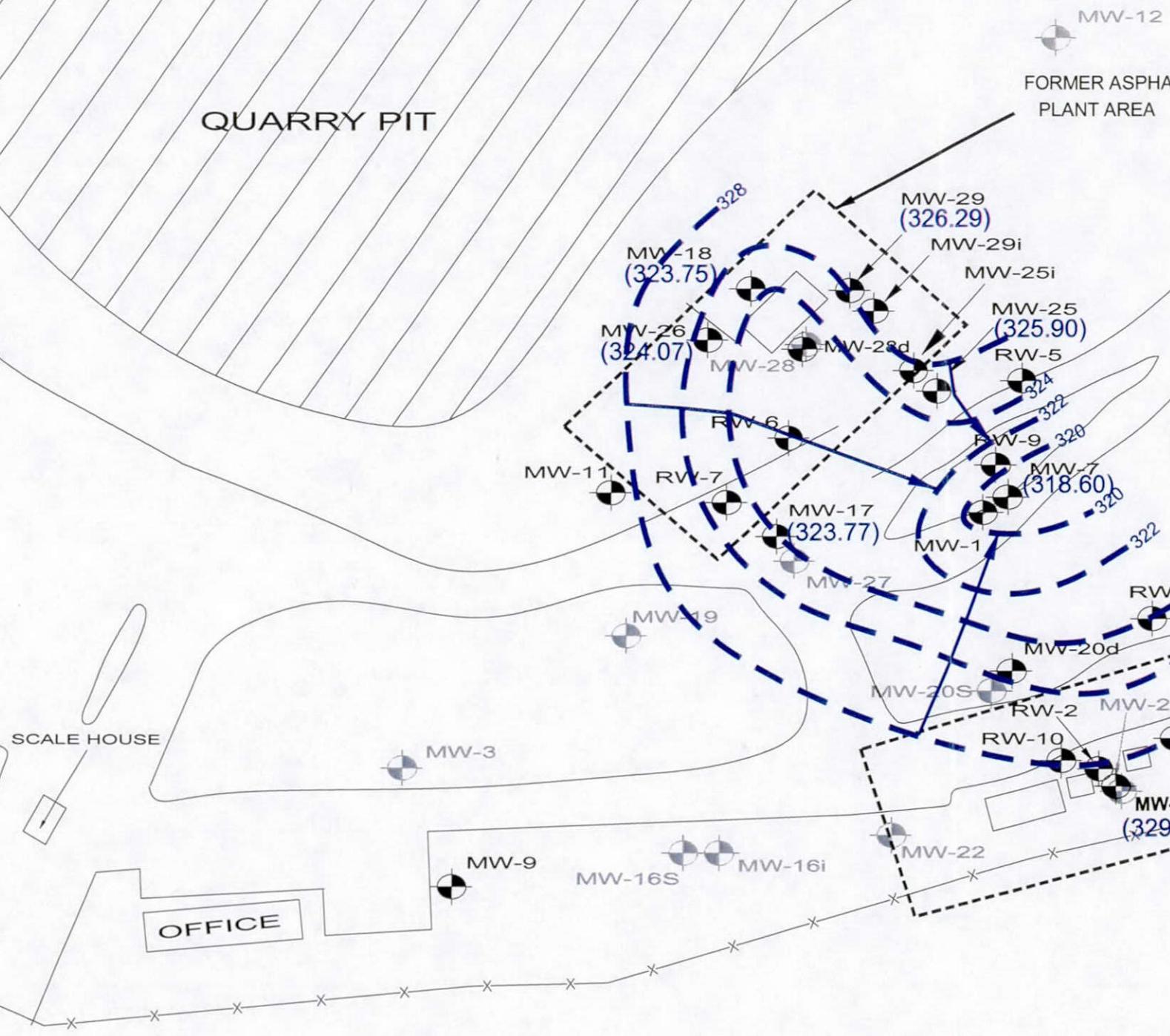
Scale: As Shown	Date: Dec 7, 2007	Figure Number: 2
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PG	PE	Drawing Title
JB		
CB	PM	
WF	JB	
Project #		
57001		
Date		
Dec 2009		
Scale		
AS SHOWN		

Site Detail Diagram
Former Nello Teer Quarry
5013 Denfield Street; Durham, North Carolina
Hanson Aggregates of North America
Irving, Texas

QUARRY PIT

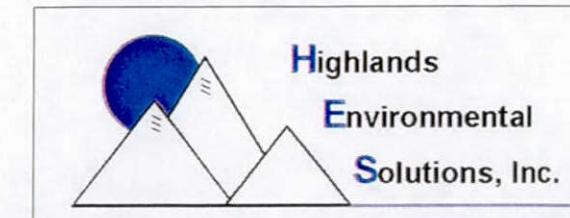


LEGEND

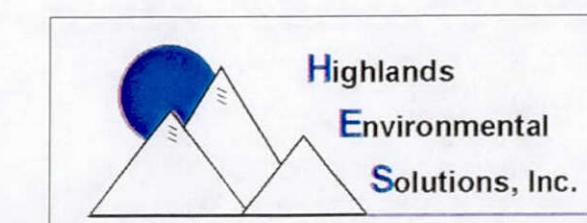
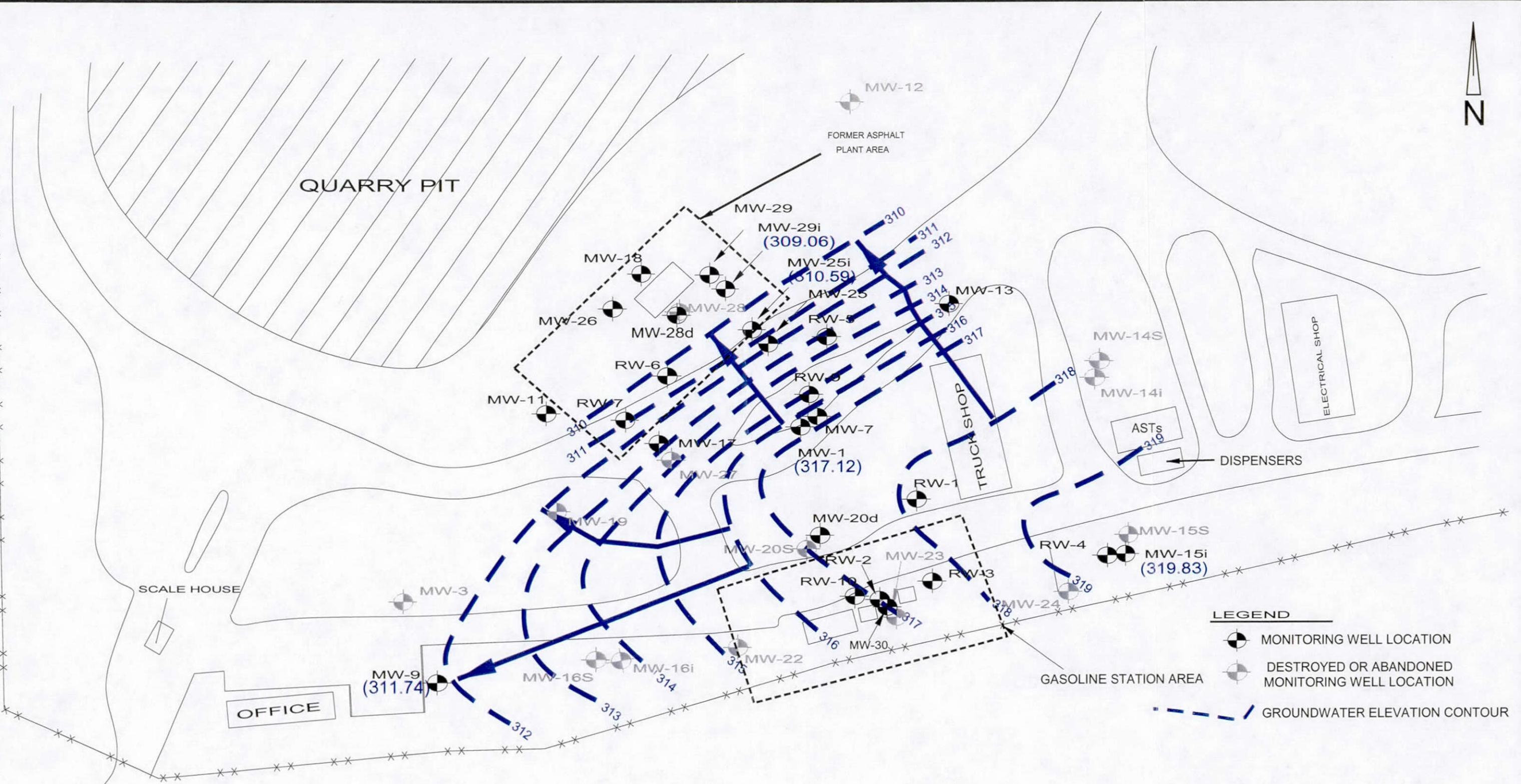
- MONITORING WELL LOCATION
- DESTROYED OR ABANDONED MONITORING WELL LOCATION
- GROUNDWATER ELEVATION CONTOUR

Approximate Scale
0' 25' 50'

Note: Water table elevation contours were generated based on water level data collected on 12/15/2009. The contours represent data interpolation between known data points (i.e., wells).

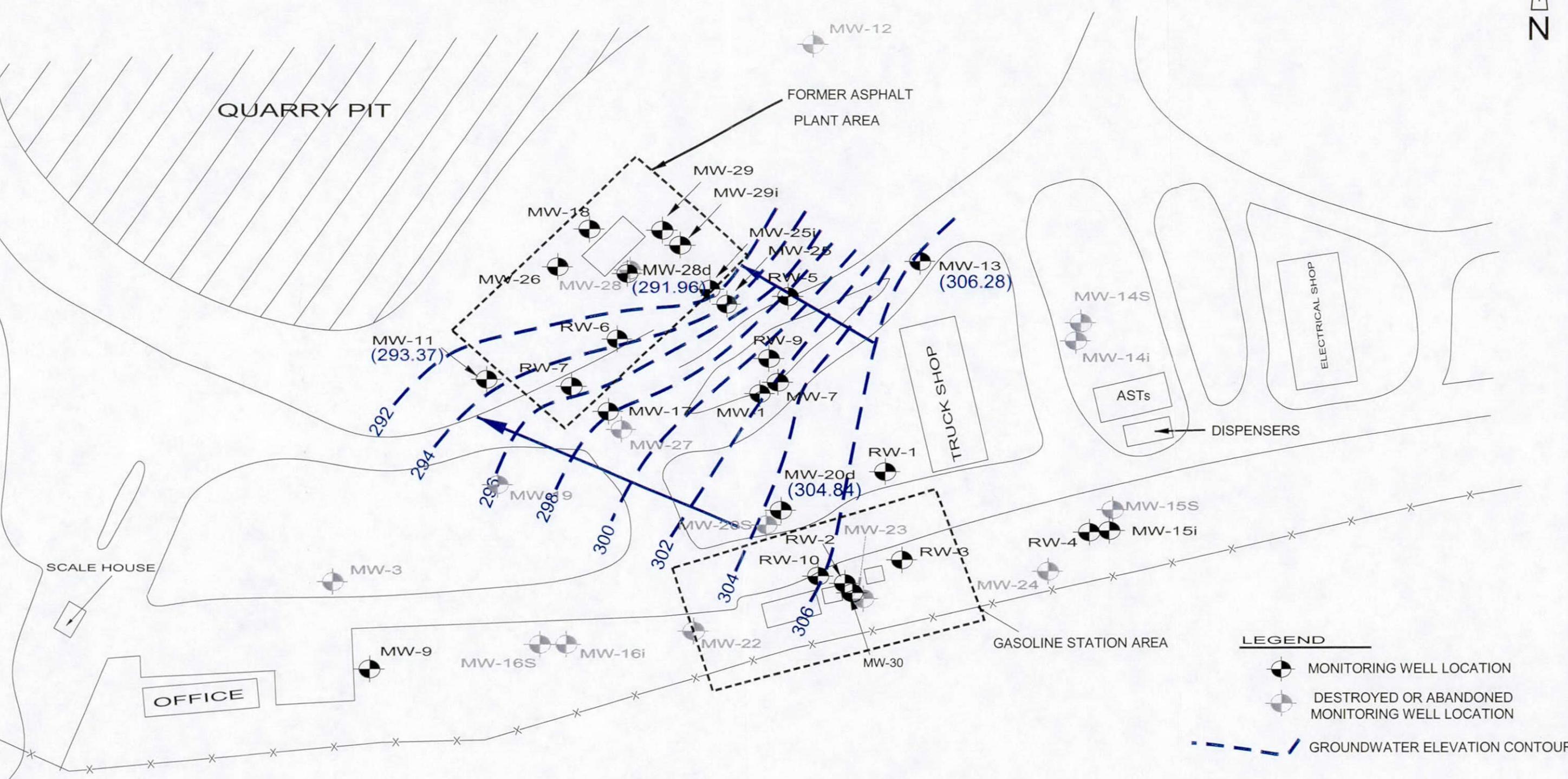


PG: JB	PE:	Drawing Name
DB: WCF/TD	PM: JB	
Project Number: 57001		Site / Client Name
Date: December 2009		Former Nello Teer Quarry 5013 Denfield Street: Durham, North Carolina Hanson Aggregates of North America Irving, Texas
Scale: AS SHOWN		Fig: 4A



PG: JB	PE:	Drawing Name
DB: WCF/TD	PM: JB	Potentiometric Surface Diagram
Project Number:	57001	Intermediate Wells (December 2009)
Date:	December 2009	Former Nello Teer Quarry
Scale:	AS SHOWN	5013 Denfield Street; Durham, North Carolina Hanson Aggregates of North America Irving, Texas

N

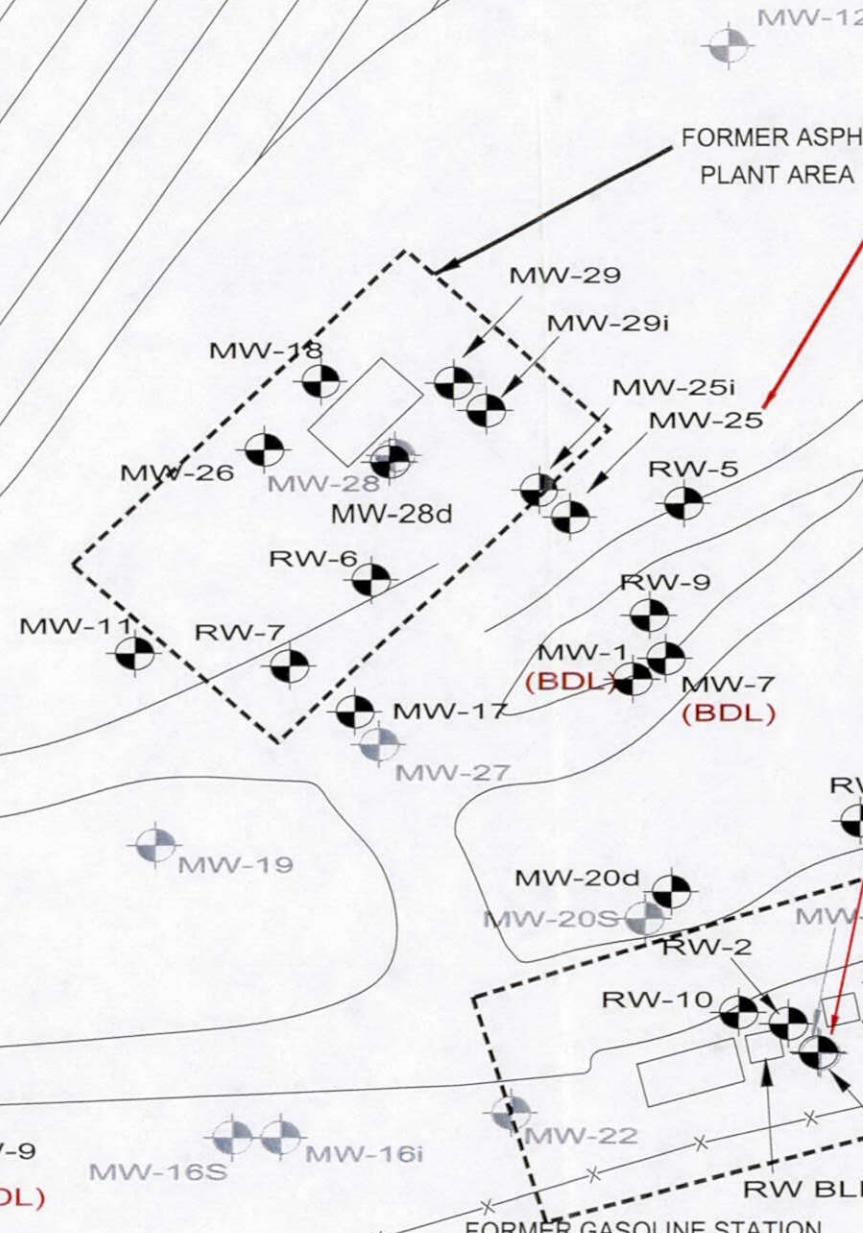


Note: Water table elevation contours were generated based on water level data collected on 12/15/2009. The contours represent data interpolation between known data points (i.e., wells).



PO: JB DO: WCF/TD	PE: PM: JB	Drawing Name: Potentiometric Surface Diagram Deep Wells (December 2009)
Project Number: 57001	Date: December 2009	Scale: AS SHOWN
Former Nello Teer Quarry 5013 Denfield Street; Durham, North Carolina Hanson Aggregates of North America Irving, Texas		Page: 4C

QUARRY PIT



SAMPLE ID	CONSTITUENT	CONCENTRATION ($\mu\text{g/l}$)	NCDENR 2L STANDARD ($\mu\text{g/l}$)
MW-25	1,1 Dichloroethane	6.7	6.0
MW-30	Benzene	3.6	1.0

LEGEND

- MONITORING WELL LOCATION
- DESTROYED OR ABANDONED MONITORING WELL LOCATION

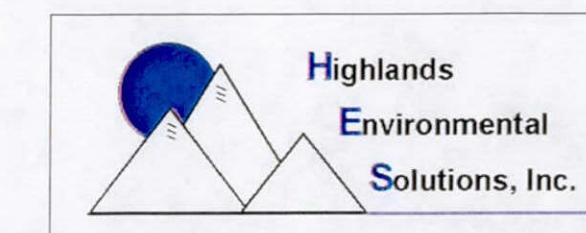
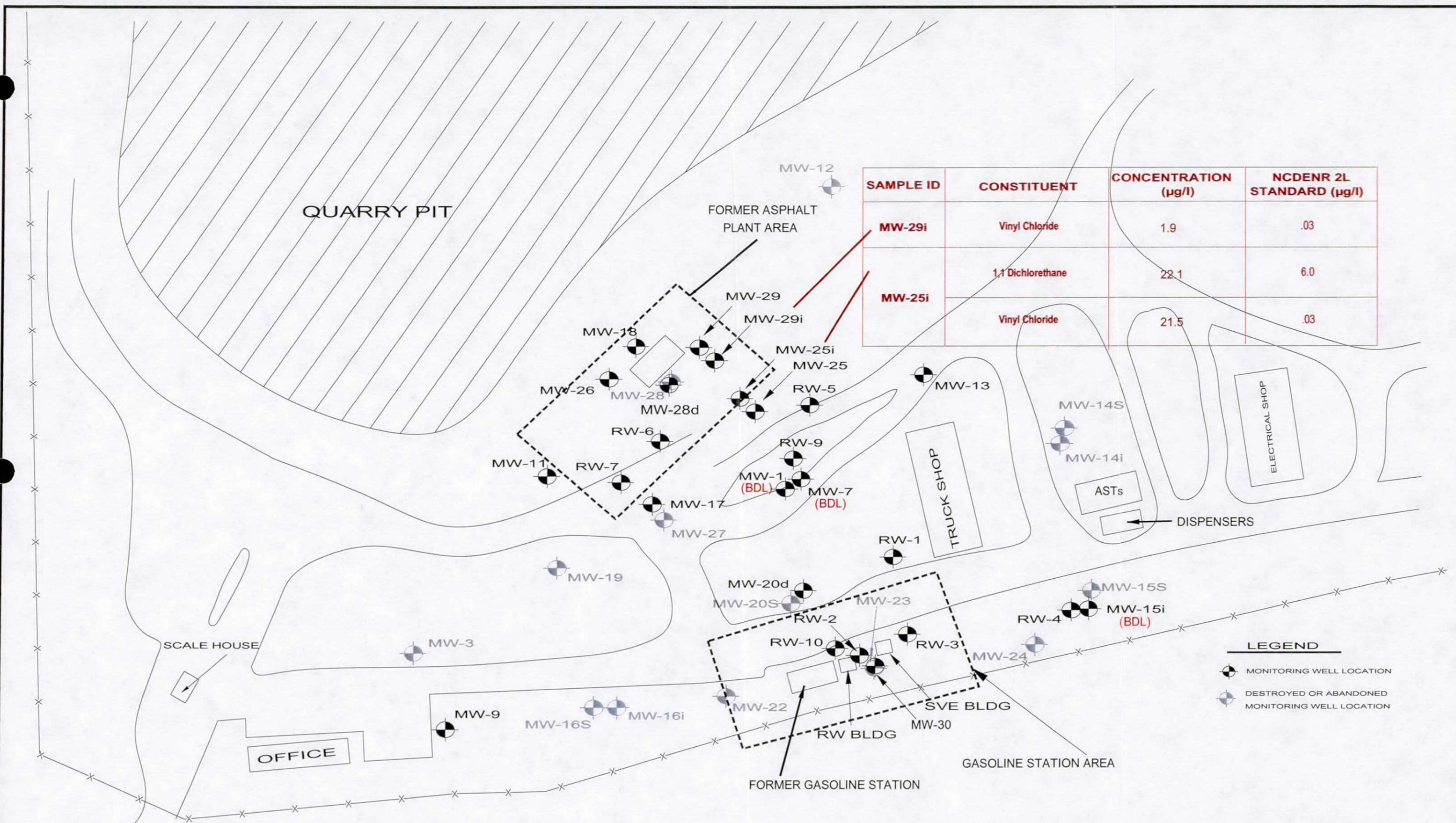


PO: JB	PE:	Drawing Name: NCDENR 2L Exceedance Concentration Diagram Shallow Zone (December 2009)
DB: WCF	PM: JB	Site / Client Name: Former Nello Teer Quarry
Project Number: 57001		5013 Denfield Street, Durham, North Carolina
Date: Dec 2009		Hanson Aggregates of North America
Scale: AS SHOWN		Irving, Texas

QUARRY PIT

FORMER ASPHALT
PLANT AREA

SAMPLE ID	CONSTITUENT	CONCENTRATION ($\mu\text{g/l}$)	NCDENR 2L STANDARD ($\mu\text{g/l}$)
MW-29i	Vinyl Chloride	1.9	.03
MW-25i	1,1 Dichlorethane	22.1	6.0
MW-25	Vinyl Chloride	21.5	.03



Project Number:	57001	PE:	
DB:	WCF/TD	PM:	JB
Date:	Dec 2009	Scale:	AS SHOWN
Drawing Name NCDENR 2L Exceedance Concentration Diagram Intermediate Zone Former Asphalt Plant Area			

Former Nello Teer Quarry
5013 Denfield Street; Durham, North Carolina
Hanson Aggregates of North America
Irving, Texas

QUARRY PIT

FORMER ASPHALT
PLANT AREA

SAMPLE ID	CONSTITUENT	CONCENTRATION ($\mu\text{g/l}$)	NCDENR 2L STANDARD ($\mu\text{g/l}$)
MW-20D	1,2 - Dichloroethane	0.53	0.4
MW-28D	Vinyl Chloride	2.4	0.03
	Vinyl Chloride	0.58	0.03

MW-12
MW-29
MW-29i
MW-18
MW-26
MW-28
MW-28d
MW-11
RW-7
RW-6
MW-17
MW-27
MW-1
MW-7
MW-20d
MW-20S
MW-23
RW-2
RW-10
RW-3
MW-22
RW-BLDG
SVE BLDG

SCALE HOUSE

MW-3

OFFICE

MW-9

MW-16S MW-16i

FORMER GASOLINE STATION

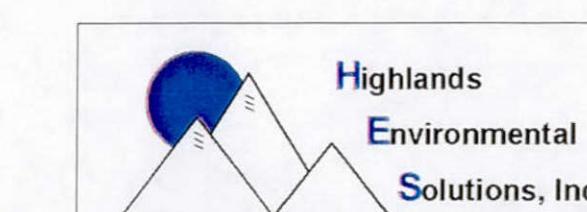
GASOLINE STATION AREA

MW-13
TRUCK SHOP
ASTs
DISPENSERS

ELECTRICAL SHOP

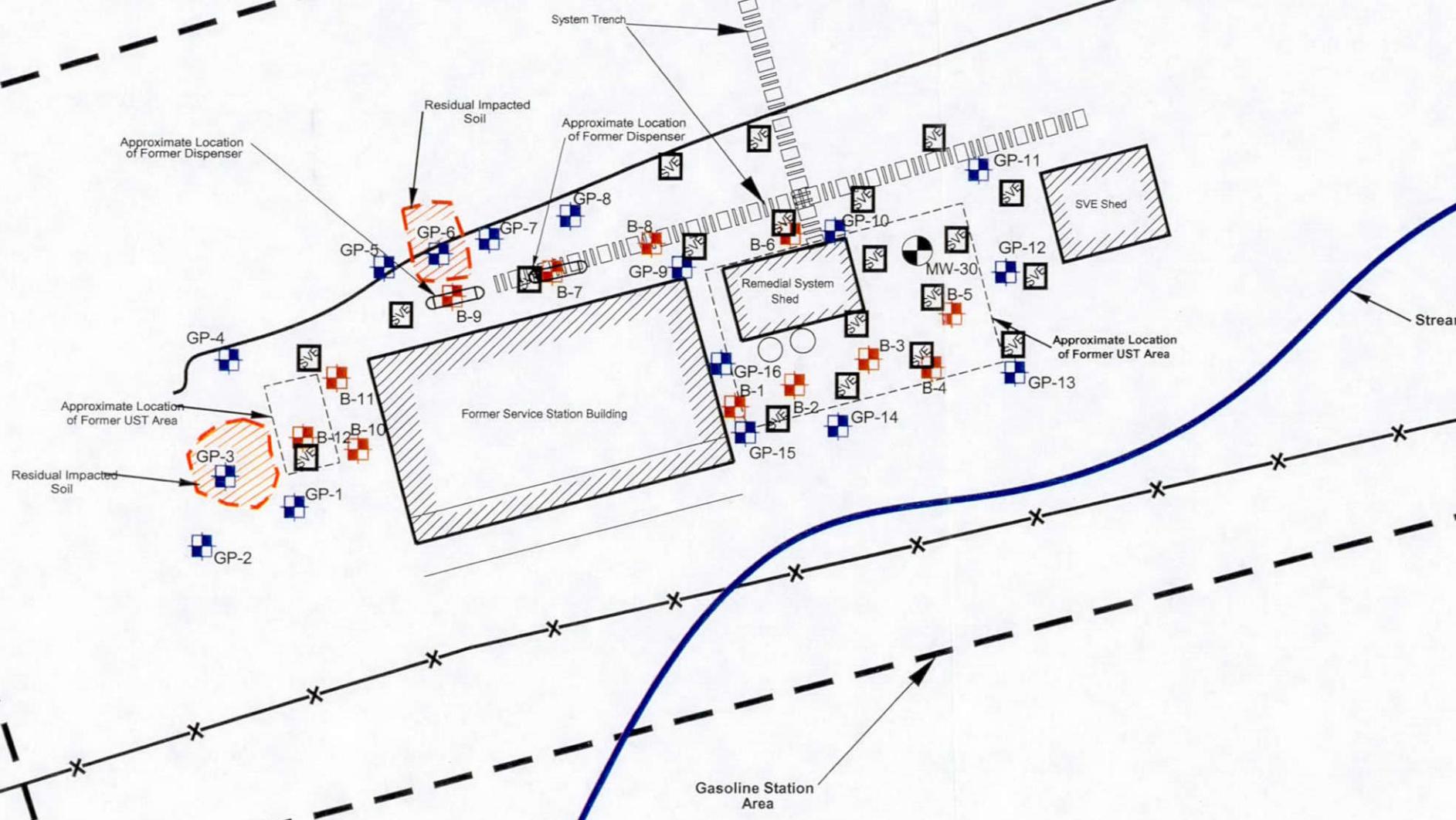
LEGEND

- MONITORING WELL LOCATION
- DESTROYED OR ABANDONED MONITORING WELL LOCATION



PG: JB	PE:	Drawing Name
DB: WCF/TD	PM: JB	NCDENR 2L Exceedance Concentration Diagram
Project Number:		Deep Zone Former Asphalt Plant Area
57001		
Date:		Former Nello Teer Quarry
Dec 2009		5013 Denfield Street; Durham, North Carolina
Scale:		Hanson Aggregates of North America
AS SHOWN		Irving, Texas

NORTH



APPROXIMATE SCALE
0' 10' 20' 40'

Legend

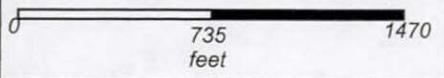
- Proposed Monitoring Well Location
- Approximate Location of Soil Boring (Quantum)
- Approximate Location of Soil Boring (HES)
- Approximate Location of Soil Vapor Extraction Point



PG:	JB	PE:	Drawing Name
CB:	WCF	PM:	JB
Project Number		Site / Client Name	
57001		Former Nello Teer Quarry	
Date: December 2009		5013 Denfield Street; Durham, North Carolina	
		Hanson Aggregates of North America	
		Irving, Texas	
Scale: AS SHOWN		Folio: 6	



Approximate Scale



Yellow circle: Owner suspects presence of unused well.

Red dot: Confirmed water supply well location.

Receptor Survey Diagram

Project Name	Former Nello Teer Quarry 5013 Denfield Street; Durham, North Carolina	
Client	Hanson Aggregates of North America Irving, Texas	
Project #	57001	Drawn by TD
Scale	As shown	Date 8-14-08
		Fig. # 7



APPENDIX B
Tables

Table 1

Hanson Aggregates
Durham, NC
HES Project # 57001

**Summary of Analytical Data
(Soil Samples - HES Soil Assessment Activities)**

Sample ID Number	Collection Date	Analytical Method → Contaminant of Concern → Sample Depth (ft: BG8)	8260(mg/kg)																
			Acetone	Benzene	n - Butylbenzene	sec - Butylbenzene	Diisopropyl ether	Ethylbenzene	Isopropylbenzene	p - Isopropyltoluene	Methylcne chloride	MTBE	Naphthalene	n - Propyl benzene	Toluene	1,2,4 - Trimethylbenzene	1,3,5 - Trimethylbenzene	Total Xylenes	All Other Volatile Organic Compounds
GP-1B	12/14/09	5-10	BDL	0.0015	BDL	BDL	.0024	BDL	BDL	BDL	.0017	BDL	BDL	BDL	.0038	BDL	BDL	BDL	
GP-2B	12/14/09	5-10	BDL	BDL	BDL	.0035	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
GP-3B	12/14/09	5-10	BDL	BDL	.843	.422	BDL	10.5	1.16	.284	2.03	BDL	6.42	3.53	.170	1.76	.166	4.13	BDL
GP-4B	12/14/09	5-10	BDL	BDL	BDL	.0052	.0025	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
GP-5B	12/14/09	5-10	BDL	BDL	BDL	.0038	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
GP-6A	12/14/09	0-5	.0415	BDL	.124	.0307	BDL	.0503	.0233	.0336	BDL	BDL	.603	.122	BDL	1.22	.368	.0898	BDL
GP-7B	12/14/09	5-10	BDL	BDL	BDL	.0034	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
GP-8B	12/14/09	5-10	BDL	.0038	BDL	BDL	.0027	.0030	BDL	BDL	BDL	BDL	BDL	.0022	BDL	.0015	.0010	.0045	BDL
GP-10B	12/14/09	5-10	BDL	BDL	.209	.503	BDL	.0054	.0922	BDL	BDL	BDL	.0159	.315	.0085	BDL	BDL	.0064	BDL
GP-11A	12/14/09	0-5	.0442	BDL	BDL	BDL	BDL	BDL	BDL	.0093	BDL	BDL	BDL	BDL	BDL	.0022	BDL	BDL	BDL
GP-13B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
GP-14A	12/14/09	0-5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
GP-15B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
GP-16A	12/14/09	0-5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	.0053	BDL	BDL	BDL	
GP-17B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
Soil-to-GW MSCC mg/Kg			24	0.0056	4.3	3.3	0.37	4.9	1.7		0.02	0.091	0.16	1.7	4.3	8.5	8.3	4.6	CS
Residential MSCC mg/Kg			14000	18	626	626	156	1560	1564		85	350	313	626	1200	782	782	3129	CS
Industrial/Commercial MSCC mg/Kg			360000	164	16350	16350	4088	40000	40880		763	3100	8176	16350	32000	20440	20440	81760	CS

Notes: "cs" denotes compound specific. "BDL" denotes Below Detection Limit.

"MSCC" denotes Maximum Soil Contaminant Concentration.

Italics denotes concentration greater than Soil-to-Groundwater MSCCs.

Red denotes concentration greater than Industrial/Commercial MSCCs.

Shading denotes no standard

Table 2

Hanson Aggregates
Durham, NC
HES Project # 57001

Summary of Analytical Data
(Soil Samples - HES Soil Assessment Activities)

Analytical Method →			8270									
Sample ID Number	Contaminant of Concern		Acenaphthene	Anthracene	1,2 - Dinitrotoluene	Fluoranthene	Fluorene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	All Other Semi-Volatile Organic Compounds
	Collection Date	Sample Depth (ft. BGS)										
GP-1B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-2B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-3B	12/14/09	5-10	.103	.0685	.121	BDL	.269	1.58	.635	.559	.0691	BQL
GP-4B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-5B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-6A	12/14/09	0-5	BDL	BDL	BDL	BDL	BDL	BDL	.324	.120	BDL	BQL
GP-7B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-8B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-10B	12/14/09	5-10	.581	BDL	BDL	1.28	BDL	BDL	BDL	2.16	1.22	BQL
GP-11A	12/14/09	0-5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-13B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-14A	12/14/09	0-5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-15B	12/14/09	5-10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-16A	12/14/09	0-5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BQL
GP-17B	12/14/09	5-10	.175	BDL	BDL	.299	BDL	BDL	BDL	.214	.708	BQL
Soil-to-GW MSCC mg/Kg			8.2	940		290	47	3.6	0.16	56	270	CS
Residential MSCC mg/Kg			940	4600		620	620	63	313	469	469	CS
Industrial/Commercial MSCC mg/Kg			24000	122000		16400	16400	1635	8176	12264	12264	CS

Notes: "cs" denotes compound specific. "BDL" denotes Below Detection Limit.

"MSCC" denotes Maximum Soil Contaminant Concentration.

Italics denotes concentration greater than Soil-to-Groundwater MSCCs.

Red denotes concentration greater than Industrial/Commercial MSCCs.

Shading denotes no standard

Table 3

Hanson Aggregates
Durham, NC
HES Project # 57001

**Summary of Analytical Data
(Soil Samples - HES Soil Assessment Activities)**

Analytical Method →			VPH & EPH				METALS
Sample ID Number	Contaminant of Concern		C5 - C8 Aliphatics	C9 - C18 Aliphatics	C9 - C22 Aromatics	C19 - C36 Aliphatics	LEAD
	Collection Date	Sample Depth (ft. BGS)					
GP-1B	12/14/09	5-10	5.53	11.4	BDL	BDL	BDL
GP-2B	12/14/09	5-10	BDL	BDL	BDL	BDL	6.8
GP-3B	12/14/09	5-10	80.2	623	322	57.3	BDL
GP-4B	12/14/09	5-10	BDL	BDL	BDL	BDL	4.3
GP-5B	12/14/09	5-10	BDL	BDL	.498	BDL	BDL
GP-6A	12/14/09	0-5	BDL	111.5	54	BDL	8.0
GP-7B	12/14/09	5-10	BDL	BDL	BDL	30.3	10.3
GP-8B	12/14/09	5-10	BDL	BDL	BDL	BDL	6.7
GP-10B	12/14/09	5-10	BDL	1061.5	803.9	196	6.0
GP-11A	12/14/09	0-5	BDL	BDL	BDL	BDL	7.2
GP-13B	12/14/09	5-10	BDL	11.2	BDL	BDL	BDL
GP-14A	12/14/09	0-5	BDL	BDL	BDL	BDL	6.3
GP-15B	12/14/09	5-10	BDL	2.85	2.95	BDL	BDL
GP-16A	12/14/09	0-5	BDL	BDL	BDL	108	5.3
GP-17B	12/14/09	5-10	BDL	340.97	243.28	82.9	BDL
Soil-to-GW MSCC mg/Kg			68	540	31		270
Residential MSCC mg/Kg			939	1500	469	31000	469
Industrial/Commercial MSCC mg/Kg			24528	40000	12264	810000	12264

Notes: "cs" denotes compound specific. "BDL" denotes Below Detection Limit.

"MSCC" denotes Maximum Soil Contaminant Concentration.

Italics denotes concentration greater than Soil-to-Groundwater MSCCs.

Red denotes concentration greater than Industrial/Commercial MSCCs.

Shading denotes no standard

Table 4

Hanson Denfield Quarry
HES Project #57001

Summary of Well Construction and Liquid Level Data

Well #	Date	TOC Elevation	Screen Interval	Depth to Water (Top of Casing)	Liquid Surface Elevation	Purge Volume (Gallons)
Shallow Zone Wells						
MW-7	4/12/1995	329.26	9.0 - 14.0	10.79	318.47	-
	4/13/2004			10.23	319.03	8
	12/12/05			11.58	317.68	5
	11/14/06			12.33	316.93	4
	07/23/07			12.30	316.96	4
	11/15/07			Dry	>315.00	-
	08/11/08			12.10	317.16	4
	11/07/08			12.13	317.13	1
	05/19/09			10.62	318.64	3
	12/15/09			10.66	318.60	2
MW-17	04/12/95	327.59	2.5 - 12.5	4.00	323.59	-
	04/13/04			4.41	323.18	4
	12/12/05			4.38	323.21	4
	11/14/06			4.13	323.46	4
	07/23/07			5.31	322.28	5
	11/15/07			5.43	322.16	5
	08/11/08			5.09	322.5	5
	11/07/08			4.62	322.97	4
	05/19/09			4.95	322.64	4
	12/15/09			3.82	323.77	4
MW-18	04/12/95	328.43	3.0 - 13.0	4.95	323.48	-
	04/13/04			5.32	323.11	4
	12/12/05			5.28	323.15	3.9
	11/14/06			5.05	323.38	4
	07/23/07			6.21	322.22	5
	11/15/07			6.36	322.07	5
	08/11/08			5.97	322.46	4
	11/07/08			5.18	323.25	3
	05/19/09			5.51	322.92	4
	12/15/09			4.68	323.75	4
MW-25	04/12/95	328.92	4.0 - 14.0	5.35	323.57	-
	04/13/04			6.56	322.36	3.75
	12/12/05			6.26	322.66	3.9
	11/14/06			5.22	323.7	5
	07/23/07			8.03	320.89	5
	11/15/07			8.27	320.65	4
	08/11/08			7.82	321.1	1.02
	11/07/08			7.12	321.8	3.5
	05/19/09			7.20	321.72	3.5
	12/15/09			3.02	325.90	5.4
MW-26	04/12/95	328.92	3.0 - 13.0	5.67	323.25	-
	04/13/04			5.49	323.43	3.75
	12/12/05			NM	-	
	11/14/06			5.32	323.6	-
	07/23/07			6.46	322.46	5
	11/15/07			6.55	322.37	5
	08/11/08			6.20	322.72	1.1
	11/07/08			5.76	323.16	3.5
	05/19/09			5.73	323.19	4
	12/15/09			4.85	324.07	4.5
MW-29	04/13/04	328.89	4.0 - 14.0	6.39	322.5	4
	12/12/05			6.05	322.84	-
	11/14/06			4.82	324.07	-
	07/23/07			7.74	321.15	5
	11/15/07			8.65	320.24	5
	08/11/08			7.65	321.24	3
	11/07/08			6.86	322.03	3.5
	05/19/09			7.01	321.88	3.5
	12/15/09			2.60	326.29	5.5
MW-30	12/15/09	332.34	4.0-19.0	3.34	329.00	7.5

Top of Casing Elevations from Quantum Environmental
Water Level Measurements Taken on 11/14/06, 07/23/07, and 11/15/07

Table 4

Hanson Denfield Quarry
HES Project #57001

Summary of Well Construction and Liquid Level Data

Well #	Date	TOC Elevation	Screen Interval	Depth to Water (Top of Casing)	Liquid Surface Elevation	Purge Volume (Gallons)
Intermediate Zone Wells						
MW-1	04/12/95	329.5	20.0 - 35.0	14.02	315.48	-
	04/13/04			13.10	316.39	11
	12/12/05			16.61	312.89	36
	11/14/06			17.35	312.15	35
	07/23/07			14.72	314.78	36
	11/15/07			17.65	311.85	34
	08/12/08			14.85	314.65	36
	11/07/08			14.75	314.75	30
	05/19/09			13.35	316.15	22
	12/15/09			12.38	317.12	22
	04/12/95			23.27	310.38	-
	04/13/04			20.55	313.1	10
MW-9	12/15/05	333.65	25.0 - 40.0	-	-	-
	11/14/06			26.32	307.33	-
	07/23/07			22.87	310.78	9
	11/15/07			26.69	306.96	8
	08/11/08			23.33	310.32	7
	11/07/08			23.26	310.39	8
	05/19/09			21.81	311.84	9
	12/15/09			21.91	311.74	9
	04/12/95	329.53	25.0 - 40.0	15.99	313.54	-
	04/13/04			11.89	317.64	14.25
	12/12/05			16.11	313.42	12
	11/14/06			16.18	313.35	12
	07/23/07			12.65	316.88	15
	11/15/07			15.74	313.79	15
	08/12/08			13.60	315.93	13
	11/07/08			11.90	317.63	13.5
	05/19/09			9.13	320.4	15
	12/15/09			9.70	319.83	15
MW-23	04/12/95	331.87	25.0 - 47.0	19.62	312.25	-
	04/13/04			16.33	315.54	15.5
	12/12/05			29.62	302.25	8.7
	11/14/06			24.41	307.46	14
	07/23/07			18.12	313.75	18
	11/15/07			21.57	310.3	20
	08/11/08			-	-	-
	11/07/08			-	-	-
	05/19/09			-	-	-
	12/15/09			-	-	-
MW-25i	04/13/04	329.03	18.0 - 33.0	19.69	309.34	7
	12/12/05			22.71	306.32	5.2
	11/14/06			22.18	306.85	6
	07/23/07			21.14	307.89	6
	11/15/07			23.82	305.21	5
	08/12/08			21.64	307.39	5
	11/07/08			20.96	308.07	5
	05/19/09			20.45	308.58	6
	12/15/09			18.44	310.59	7
MW-29i	04/13/04	328.74	18.0 - 33.0	19.22	309.52	7
	12/12/05			22.71	306.03	5.2
	11/14/06			23.33	305.41	5
	07/23/07			21.36	307.38	6
	11/15/07			23.72	305.02	5
	08/12/08			22.15	306.59	6
	11/07/08			21.25	307.49	6
	05/19/09			19.50	309.24	6
	12/15/09			19.68	309.06	6.5

Top of Casing Elevations from Quantum Environmental
Water Level Measurements Taken on 11/14/06, 07/23/07, and 11/15/07

Table 4

Hanson Denfield Quarry
HES Project #57001

Summary of Well Construction and Liquid Level Data

Well #	Date	TOC Elevation	Screen Interval	Depth to Water (Top of Casing)	Liquid Surface Elevation	Purge Volume (Gallons)
Deep Zone Wells						
MW-11	4/12/1995	327.87	35.0 - 50.0	35.53	292.34	-
	4/13/2004			32.67	295.2	9
	12/12/05			36.00	291.87	7
	11/14/06			36.02	291.85	7
	07/23/07			34.68	293.19	9
	11/15/07			36.86	291.01	10
	08/11/08			35.44	292.43	8
	11/07/08			35.42	292.45	7
	05/19/09			35.16	292.71	7
	12/16/09			34.50	293.37	8
MW-13	04/12/95	326.48	50.0 - 65.0	23.60	302.88	-
	4/13/2004			20.98	305.5	22
	12/12/05			24.19	302.29	20.5
	11/14/06			24.44	302.04	20
	07/23/07			21.99	304.49	24
	11/15/07			24.25	302.23	23
	08/12/08			21.84	304.64	25
	11/07/08			21.36	305.12	21.3
	05/19/09			20.68	305.8	22
	12/16/09			20.20	306.28	22
MW-20d	04/12/95	329.58	110.0 - 115.0	26.55	303.03	-
	4/13/2004			25.04	304.54	45
	12/12/05			28.52	301.06	43.3
	11/14/06			28.87	300.71	42
	07/23/07			26.06	303.52	45
	11/15/07			28.72	300.86	50
	08/11/08			26.08	303.5	50
	11/07/08			25.83	303.75	50
	05/19/09			24.95	304.63	44
	12/16/09			24.74	304.84	44
MW-28d	4/13/2004	329.97	85.0 - 90.0	36.64	293.33	27
	12/12/05			39.72	290.25	25
	11/14/06			39.62	290.35	25
	07/23/07			38.48	291.49	50
	11/15/07			40.48	289.48	30
	08/11/08			39.27	290.7	25
	11/07/08			39.23	290.74	25
	05/19/09			39.00	290.97	25
	12/16/09			38.01	291.96	25

Top of Casing Elevations from Quantum Environmental
Water Level Measurements Taken on 11/14/06, 07/23/07, and 11/15/07

Table 5

Hanson Denfield Quarry
HES Project #57001

**Summary of Analytical Data
(Groundwater Samples)**

North Carolina 2E Quality Standard (sq ft)	6000	1	70	70	3	1000	6	7	0.4	70	70	70	100	600	70	5	4000	20	70	600	70	200	3	400	400	0.03	500	0.02	80	300	30	6	200	200	
North Carolina Gross Containment Levels	6E+06	5000	6000	8500		3000	140000	6000	7000	400	7000	20000	70000	100000	84500	25000	5000	4000000	20000	30000	260000	70000	200000	3000	28500	25000	30	85500	50	2120	990	12500	6000	410	200

"cs" denotes compound-specific

"cs" denotes compound specific. "na" denotes not analyzable.

Table Volatiles

Table 5

Hanson Denfield Quarry
HES Project #57001

Summary of Analytical Data (Groundwater Samples)

"cs" denotes compound specific
"na" denotes not analyzed.
"old" denotes concentration measured North Carolina Pt. Quality Standard.

bold denotes concentration exceeds North Carolina 2L Quality Standards

Table 5

Hanson Denfield Quarry
HES Project #57001

Summary of Analytical Data (Groundwater Samples)

Bold denotes concentration exceeds North Carolina 2L Quality Standard

North Carolina Gross Commitment Levels

"cs" denotes compound specific. "na" denotes not analyzed.

Bold denotes concentration exceeds North Carolina 2L Quality Standards

Table 6

**Hanson Denfield Quarry
HES Project #57001**

Summary of Water Supply Wells

Well Owner/User	Parcel #	Address	Phone Number	water meter	Well In Use
ROBINS DOUGLAS M	177621	4918 DENFIELD ST	919-477-5375	No	Yes
ROBINS DOUGLAS M	177612	5010 DENFIELD ST	919-477-5375	No	Yes
BARTELL JULIUS TRAVIS BARTELL CHERI DIANE	172634	4911 DENFIELD ST		No	Yes
THOMAS RODNEY T	177630	1002 COMMUNICATION DR	919-471-6852	No	Yes
HARRIS HARVEY L	177629	1003 COMMUNICATION DR	919-477-8706	No	Yes
WARD DONALD W	177632	1006 COMMUNICATION DR	919-477-0471	No	Yes

"ft. BGS" = Feet Below Ground Surface

WS = Water Supply Well

APPENDIX C
Analytical Data Report



01/04/10

Technical Report for

Highlands Environmental Solutions, Inc

S7001; Durham, NC



Accutest Job Number: F70154

Sampling Date: 12/14/09

Report to:

Highlands Environmental Solutions, Inc
8410-D Falls of Neuse Rd
Raleigh, NC 27615
jbeaman@hesnc.com

ATTN: Joe Beaman

Total number of pages in report: 181



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Conference
and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director



Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Test results relate only to samples analyzed.

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Sample Summary

Highlands Environmental Solutions, Inc
S7001; Durham, NC

Job No: F70154

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F70154-1	12/14/09	08:30 TD	12/15/09	SO	Soil	GP-1B
F70154-2	12/14/09	08:35 TD	12/15/09	SO	Soil	GP-2B
F70154-3	12/14/09	08:45 TD	12/15/09	SO	Soil	GP-3B
F70154-4	12/14/09	09:00 TD	12/15/09	SO	Soil	GP-4B
F70154-5	12/14/09	09:10 TD	12/15/09	SO	Soil	GP-5B
F70154-6	12/14/09	10:00 TD	12/15/09	SO	Soil	GP-6A
F70154-7	12/14/09	10:15 TD	12/15/09	SO	Soil	GP-7B
F70154-8	12/14/09	10:30 TD	12/15/09	SO	Soil	GP-8B
F70154-9	12/14/09	10:45 TD	12/15/09	SO	Soil	GP-10B
F70154-10	12/14/09	11:00 TD	12/15/09	SO	Soil	GP-11A
F70154-11	12/14/09	11:10 TD	12/15/09	SO	Soil	GP-13B
F70154-12	12/14/09	11:30 TD	12/15/09	SO	Soil	GP-14A
F70154-13	12/14/09	12:00 TD	12/15/09	SO	Soil	GP-15B

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories

Sample Summary
(continued)

Highlands Environmental Solutions, Inc

Job No: F70154

S7001; Durham, NC

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F70154-14	12/14/09	12:20 TD	12/15/09	SO	Soil	GP-16A
F70154-15	12/14/09	12:35 TD	12/15/09	SO	Soil	GP-17B

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Southeast

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Section 2

2

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID:	GP-1B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-1	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H059160.D	1	12/17/09	MM	n/a	n/a	VH2210
Run #2							

Initial Weight	
Run #1	5.77 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.049	0.025	mg/kg	
71-43-2	Benzene	0.0015	0.0049	0.00099	mg/kg	J
108-86-1	Bromobenzene	ND	0.0049	0.00099	mg/kg	
74-97-5	Bromoform	ND	0.0049	0.0017	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0049	0.0012	mg/kg	
75-25-2	Bromoform	ND	0.0049	0.0015	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0049	0.0014	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0049	0.0011	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0049	0.0011	mg/kg	
108-90-7	Chlorobenzene	ND	0.0049	0.00099	mg/kg	
75-00-3	Chloroethane	ND	0.0049	0.0020	mg/kg	
67-66-3	Chloroform	ND	0.0049	0.0017	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0049	0.00099	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0049	0.00099	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0049	0.0014	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0049	0.0020	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0049	0.0013	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0049	0.0014	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0049	0.00099	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0049	0.0011	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0049	0.0014	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0049	0.00099	mg/kg	
108-20-3	Di-Isopropyl ether	0.0024	0.0049	0.0019	mg/kg	J
594-20-7	2,2-Dichloropropane	ND	0.0049	0.0021	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0049	0.00099	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0049	0.0020	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0049	0.0016	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0049	0.0013	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0049	0.00099	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0049	0.00099	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0049	0.00099	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0049	0.0012	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-1B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-1	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0049	0.00099	mg/kg	
100-41-4	Ethylbenzene	ND	0.0049	0.00099	mg/kg	
591-78-6	2-Hexanone	ND	0.025	0.0049	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0049	0.0011	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0049	0.0011	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.025	0.0063	mg/kg	
74-83-9	Methyl bromide	ND	0.0049	0.0022	mg/kg	
74-87-3	Methyl chloride	ND	0.0049	0.0024	mg/kg	
75-09-2	Methylene chloride	ND	0.0099	0.0049	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.025	0.0082	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.0017	0.0049	0.0015	mg/kg	J
91-20-3	Naphthalene	ND	0.0049	0.0020	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0049	0.0012	mg/kg	
100-42-5	Styrene	ND	0.0049	0.00099	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0049	0.0011	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0049	0.0018	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0049	0.00099	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0049	0.0020	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0049	0.0019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0049	0.0020	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.0038	0.0049	0.00099	mg/kg	J
108-67-8	1,3,5-Trimethylbenzene	ND	0.0049	0.00099	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0049	0.0012	mg/kg	
108-88-3	Toluene	ND	0.0049	0.00099	mg/kg	
79-01-6	Trichloroethylene	ND	0.0049	0.0012	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0049	0.0020	mg/kg	
75-01-4	Vinyl chloride	ND	0.0049	0.0020	mg/kg	
108-05-4	Vinyl Acetate	ND	0.025	0.012	mg/kg	
1330-20-7	Xylene (total)	ND	0.015	0.0029	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-121%
2037-26-5	Toluene-D8	92%		71-130%
460-00-4	4-Bromofluorobenzene	93%		59-148%
17060-07-0	1,2-Dichloroethane-D4	107%		77-123%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	GP-1B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-1	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X008996.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

	Initial Weight	Final Volume
Run #1	31.5 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.90	0.36	mg/kg	
95-57-8	2-Chlorophenol	ND	0.18	0.036	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.036	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.036	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.036	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.90	0.36	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.36	0.12	mg/kg	
95-48-7	2-Methylphenol	ND	0.18	0.036	mg/kg	
	3&4-Methylphenol	ND	0.18	0.036	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.036	mg/kg	
100-02-7	4-Nitrophenol	ND	0.90	0.36	mg/kg	
87-86-5	Pentachlorophenol	ND	0.90	0.36	mg/kg	
108-95-2	Phenol	ND	0.18	0.036	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.036	mg/kg	
83-32-9	Acenaphthene	ND	0.18	0.036	mg/kg	
208-96-8	Acenaphthylene	ND	0.18	0.036	mg/kg	
120-12-7	Anthracene	ND	0.18	0.036	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.18	0.036	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.18	0.036	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.18	0.036	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.18	0.036	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.18	0.036	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.18	0.036	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.36	0.072	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.18	0.036	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.18	0.036	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.072	mg/kg	
218-01-9	Chrysene	ND	0.18	0.036	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.18	0.036	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.18	0.036	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.18	0.036	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.18	0.036	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-1B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-1	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.18	0.047	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.18	0.036	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.18	0.047	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.18	0.043	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.18	0.036	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.18	0.036	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.36	0.072	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.18	0.036	mg/kg	
132-64-9	Dibenzofuran	ND	0.18	0.036	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.36	0.072	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.36	0.072	mg/kg	
84-66-2	Diethyl phthalate	ND	0.36	0.18	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.36	0.072	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.36	0.18	mg/kg	
206-44-0	Fluoranthene	ND	0.18	0.036	mg/kg	
86-73-7	Fluorene	ND	0.18	0.036	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.18	0.036	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.18	0.036	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.18	0.036	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.043	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.18	0.036	mg/kg	
78-59-1	Isophorone	ND	0.18	0.036	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.18	0.036	mg/kg	
91-20-3	Naphthalene	ND	0.18	0.036	mg/kg	
98-95-3	Nitrobenzene	ND	0.18	0.036	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.18	0.036	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.072	mg/kg	
85-01-8	Phenanthrene	ND	0.18	0.036	mg/kg	
129-00-0	Pyrene	ND	0.18	0.036	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.18	0.036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	87%		40-102%
4165-62-2	Phenol-d5	85%		41-100%
118-79-6	2,4,6-Tribromophenol	87%		42-108%
4165-60-0	Nitrobenzene-d5	82%		40-105%
321-60-8	2-Fluorobiphenyl	81%		43-107%
1718-51-0	Terphenyl-d14	83%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-1B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-1	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	MADEP VPH		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037149.D	1	12/17/09	AH	n/a	n/a	GUV2134
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.96 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	5.53	4.4	2.3	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3.2	1.8	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	1.2	0.58	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
460-00-4	BFB		129%		70-130%	
460-00-4	BFB		104%		70-130%	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-1B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-1	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13540.D	1	12/21/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	11.9 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	19	19	mg/kg	
	C9-C18 Aliphatics	11.4	9.6	9.6	mg/kg	
	C19-C36 Aliphatics	ND	9.6	9.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		40-140%		
321-60-8	2-Fluorobiphenyl	68%		40-140%		
580-13-2	2-Bromonaphthalene	57%		40-140%		
3386-33-2	1-Chlorooctadecane	55%		40-140%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-1B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-1	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.9
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 5.1	5.1	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17488

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	GP-2B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-2	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	G0062018.D	1	12/16/09	MM	n/a	n/a	VG2344

Initial Weight	
Run #1	4.53 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.065	0.033	mg/kg	
71-43-2	Benzene	ND	0.0065	0.0013	mg/kg	
108-86-1	Bromobenzene	ND	0.0065	0.0013	mg/kg	
74-97-5	Bromochloromethane	ND	0.0065	0.0022	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0065	0.0016	mg/kg	
75-25-2	Bromoform	ND	0.0065	0.0020	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0065	0.0018	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0065	0.0014	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0065	0.0014	mg/kg	
108-90-7	Chlorobenzene	ND	0.0065	0.0013	mg/kg	
75-00-3	Chloroethane	ND	0.0065	0.0026	mg/kg	
67-66-3	Chloroform	ND	0.0065	0.0022	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0065	0.0013	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0065	0.0013	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0065	0.0018	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0065	0.0026	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0065	0.0017	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0065	0.0018	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0065	0.0013	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0065	0.0014	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0065	0.0018	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0065	0.0013	mg/kg	
108-20-3	Di-Isopropyl ether	0.0035	0.0065	0.0025	mg/kg	J
594-20-7	2,2-Dichloropropane	ND	0.0065	0.0027	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0065	0.0013	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0065	0.0026	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0065	0.0021	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0065	0.0017	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0065	0.0013	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0065	0.0013	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0065	0.0013	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0065	0.0016	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-2B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-2	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0065	0.0013	mg/kg	
100-41-4	Ethylbenzene	ND	0.0065	0.0013	mg/kg	
591-78-6	2-Hexanone	ND	0.033	0.0065	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0065	0.0014	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0065	0.0014	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.033	0.0084	mg/kg	
74-83-9	Methyl bromide	ND	0.0065	0.0029	mg/kg	
74-87-3	Methyl chloride	ND	0.0065	0.0031	mg/kg	
75-09-2	Methylene chloride	ND	0.013	0.0065	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.033	0.011	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0065	0.0020	mg/kg	
91-20-3	Naphthalene	ND	0.0065	0.0026	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0065	0.0016	mg/kg	
100-42-5	Styrene	ND	0.0065	0.0013	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0065	0.0014	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0065	0.0024	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0065	0.0013	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0065	0.0026	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0065	0.0025	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0065	0.0026	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0065	0.0013	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0065	0.0013	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0065	0.0016	mg/kg	
108-88-3	Toluene	ND	0.0065	0.0013	mg/kg	
79-01-6	Trichloroethylene	ND	0.0065	0.0016	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0065	0.0026	mg/kg	
75-01-4	Vinyl chloride	ND	0.0065	0.0026	mg/kg	
108-05-4	Vinyl Acetate	ND	0.033	0.016	mg/kg	
1330-20-7	Xylene (total)	ND	0.020	0.0038	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	109%		80-121%		
2037-26-5	Toluene-D8	87%		71-130%		
460-00-4	4-Bromofluorobenzene	101%		59-148%		
17060-07-0	1,2-Dichloroethane-D4	115%		77-123%		

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Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-2B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-2	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X008997.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
Run #2							

	Initial Weight	Final Volume
Run #1	29.8 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.99	0.40	mg/kg	
95-57-8	2-Chlorophenol	ND	0.20	0.040	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.20	0.040	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.20	0.040	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.20	0.040	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.99	0.40	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.40	0.13	mg/kg	
95-48-7	2-Methylphenol	ND	0.20	0.040	mg/kg	
	3&4-Methylphenol	ND	0.20	0.040	mg/kg	
88-75-5	2-Nitrophenol	ND	0.20	0.040	mg/kg	
100-02-7	4-Nitrophenol	ND	0.99	0.40	mg/kg	
87-86-5	Pentachlorophenol	ND	0.99	0.40	mg/kg	
108-95-2	Phenol	ND	0.20	0.040	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.20	0.040	mg/kg	
83-32-9	Acenaphthene	ND	0.20	0.040	mg/kg	
208-96-8	Acenaphthylene	ND	0.20	0.040	mg/kg	
120-12-7	Anthracene	ND	0.20	0.040	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.20	0.040	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.20	0.040	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.040	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.040	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.040	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.20	0.040	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.40	0.080	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.20	0.040	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.20	0.040	mg/kg	
106-47-8	4-Chloroaniline	ND	0.20	0.080	mg/kg	
218-01-9	Chrysene	ND	0.20	0.040	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.20	0.040	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.20	0.040	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.20	0.040	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.20	0.040	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	GP-2B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-2	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.20	0.052	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.20	0.040	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.20	0.052	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.20	0.048	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.040	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.040	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.40	0.080	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.20	0.040	mg/kg	
132-64-9	Dibenzofuran	ND	0.20	0.040	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.40	0.080	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.40	0.080	mg/kg	
84-66-2	Diethyl phthalate	ND	0.40	0.20	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.40	0.080	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.40	0.20	mg/kg	
206-44-0	Fluoranthene	ND	0.20	0.040	mg/kg	
86-73-7	Fluorene	ND	0.20	0.040	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.20	0.040	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.20	0.040	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.20	0.040	mg/kg	
67-72-1	Hexachloroethane	ND	0.20	0.048	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.040	mg/kg	
78-59-1	Isophorone	ND	0.20	0.040	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.20	0.040	mg/kg	
91-20-3	Naphthalene	ND	0.20	0.040	mg/kg	
98-95-3	Nitrobenzene	ND	0.20	0.040	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.20	0.040	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.20	0.080	mg/kg	
85-01-8	Phenanthrene	ND	0.20	0.040	mg/kg	
129-00-0	Pyrene	ND	0.20	0.040	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.040	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%		40-102%
4165-62-2	Phenol-d5	76%		41-100%
118-79-6	2,4,6-Tribromophenol	75%		42-108%
4165-60-0	Nitrobenzene-d5	73%		40-105%
321-60-8	2-Fluorobiphenyl	72%		43-107%
1718-51-0	Terphenyl-d14	74%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-2B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-2	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.4
Method:	MADEP VPH		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037150.D	1	12/17/09	AH	n/a	n/a	GUV2134
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.48 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	4.1	2.2	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3.0	1.7	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	1.1	0.55	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
460-00-4	BFB		132% ^a		70-130%	
460-00-4	BFB		105%		70-130%	

(a) Outside control limits; however, sample is ND.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: GP-2B	Date Sampled: 12/14/09						
Lab Sample ID: F70154-2	Date Received: 12/15/09						
Matrix: SO - Soil	Percent Solids: 84.4						
Method: MADEP EPH REV 1.1 SW846 3545							
Project: S7001; Durham, NC							
Run #1 ^a	File ID BG13541.D	DF 1	Analyzed 12/21/09	By AMA	Prep Date 12/18/09	Prep Batch M:OP20222	Analytical Batch M:GBG439
Run #2							
	Initial Weight Run #1 11.2 g	Final Volume 2.0 ml					

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	21	21	mg/kg	
	C9-C18 Aliphatics	ND	11	11	mg/kg	
	C19-C36 Aliphatics	ND	11	11	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	65%		40-140%		
321-60-8	2-Fluorobiphenyl	58%		40-140%		
580-13-2	2-Bromonaphthalene	42%		40-140%		
3386-33-2	1-Chlorooctadecane	49%		40-140%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-2B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-2	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.4
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	6.8	5.3	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

- (1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17488

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-3B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-3	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	91.5
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062061.D	1	12/18/09	MM	n/a	n/a	VG2346
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.28 g	5.0 ml	50.0 ul
Run #2			

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	4.8	2.4	mg/kg	
71-43-2	Benzene	ND	0.48	0.096	mg/kg	
108-86-1	Bromobenzene	ND	0.48	0.096	mg/kg	
74-97-5	Bromoform	ND	0.48	0.16	mg/kg	
75-27-4	Bromochloromethane	ND	0.48	0.12	mg/kg	
75-25-2	Bromodichloromethane	ND	0.48	0.14	mg/kg	
104-51-8	o-Chlorotoluene	0.843	0.48	0.13	mg/kg	
135-98-8	n-Butylbenzene	0.422	0.48	0.11	mg/kg	J
98-06-6	sec-Butylbenzene	ND	0.48	0.11	mg/kg	
108-90-7	t-Butylbenzene	ND	0.48	0.096	mg/kg	
75-00-3	Chlorobenzene	ND	0.48	0.19	mg/kg	
67-66-3	Chloroethane	ND	0.48	0.16	mg/kg	
95-49-8	Chloroform	ND	0.48	0.096	mg/kg	
106-43-4	Chlorotoluene	ND	0.48	0.096	mg/kg	
56-23-5	Chloroethane	ND	0.48	0.13	mg/kg	
75-34-3	Chloroethylene	ND	0.48	0.19	mg/kg	
75-35-4	Chloropropene	ND	0.48	0.13	mg/kg	
563-58-6	Chlorotoluene	ND	0.48	0.13	mg/kg	
106-93-4	Dichloroethane	ND	0.48	0.096	mg/kg	
107-06-2	Dichloroethane	ND	0.48	0.11	mg/kg	
78-87-5	Dichloropropane	ND	0.48	0.13	mg/kg	
142-28-9	Dichloropropane	ND	0.48	0.096	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.48	0.18	mg/kg	
594-20-7	Di-Methyl Ether	ND	0.48	0.20	mg/kg	
124-48-1	Dibromochloromethane	ND	0.48	0.096	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.48	0.19	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.48	0.15	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.48	0.13	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.48	0.096	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.48	0.096	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.48	0.096	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.48	0.12	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-3B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-3	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	91.5
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.48	0.096	mg/kg	
100-41-4	Ethylbenzene	10.5	0.48	0.096	mg/kg	
591-78-6	2-Hexanone	ND	2.4	0.48	mg/kg	
98-82-8	Isopropylbenzene	1.16	0.48	0.11	mg/kg	
99-87-6	p-Isopropyltoluene	0.284	0.48	0.11	mg/kg	J
108-10-1	4-Methyl-2-pentanone	ND	2.4	0.62	mg/kg	
74-83-9	Methyl bromide	ND	0.48	0.21	mg/kg	
74-87-3	Methyl chloride	ND	0.48	0.23	mg/kg	
75-09-2	Methylene chloride	2.03	0.96	0.48	mg/kg	
78-93-3	Methyl ethyl ketone	ND	2.4	0.80	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.48	0.14	mg/kg	
91-20-3	Naphthalene	6.42	0.48	0.19	mg/kg	
103-65-1	n-Propylbenzene	3.53	0.48	0.12	mg/kg	
100-42-5	Styrene	ND	0.48	0.096	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.48	0.11	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.48	0.17	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.48	0.096	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.48	0.19	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.48	0.18	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.48	0.19	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	1.76	0.48	0.096	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.166	0.48	0.096	mg/kg	J
127-18-4	Tetrachloroethylene	ND	0.48	0.12	mg/kg	
108-88-3	Toluene	0.170	0.48	0.096	mg/kg	J
79-01-6	Trichloroethylene	ND	0.48	0.12	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.48	0.19	mg/kg	
75-01-4	Vinyl chloride	ND	0.48	0.19	mg/kg	
108-05-4	Vinyl Acetate	ND	2.4	1.2	mg/kg	
1330-20-7	Xylene (total)	4.13	1.4	0.28	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-121%
2037-26-5	Toluene-D8	93%		71-130%
460-00-4	4-Bromofluorobenzene	98%		59-148%
17060-07-0	1,2-Dichloroethane-D4	96%		77-123%

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Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-3B
Lab Sample ID: F70154-3
Matrix: SO - Soil
Method: SW846 8270C SW846 3550B
Project: S7001; Durham, NC

Date Sampled: 12/14/09
Date Received: 12/15/09
Percent Solids: 91.5

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	X008998.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.90	0.36	mg/kg	
95-57-8	2-Chlorophenol	ND	0.18	0.036	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.036	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.036	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.036	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.90	0.36	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.36	0.12	mg/kg	
95-48-7	2-Methylphenol	ND	0.18	0.036	mg/kg	
	3&4-Methylphenol	ND	0.18	0.036	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.036	mg/kg	
100-02-7	4-Nitrophenol	ND	0.90	0.36	mg/kg	
87-86-5	Pentachlorophenol	ND	0.90	0.36	mg/kg	
108-95-2	Phenol	ND	0.18	0.036	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.036	mg/kg	
83-32-9	Acenaphthene	0.103	0.18	0.036	mg/kg	J
208-96-8	Acenaphthylene	ND	0.18	0.036	mg/kg	
120-12-7	Anthracene	0.0685	0.18	0.036	mg/kg	J
56-55-3	Benzo(a)anthracene	ND	0.18	0.036	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.18	0.036	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.18	0.036	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.18	0.036	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.18	0.036	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.18	0.036	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.36	0.072	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.18	0.036	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.18	0.036	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.072	mg/kg	
218-01-9	Chrysene	ND	0.18	0.036	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.18	0.036	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.18	0.036	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.18	0.036	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.18	0.036	mg/kg	

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Accutest Laboratories

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-3B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-3	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	91.5
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.18	0.047	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.18	0.036	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.18	0.047	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.18	0.043	mg/kg	
121-14-2	2,4-Dinitrotoluene	0.121	0.18	0.036	mg/kg	J
606-20-2	2,6-Dinitrotoluene	ND	0.18	0.036	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.36	0.072	mg/kg	
53-70-3	Dibenzof(a,h)anthracene	ND	0.18	0.036	mg/kg	
132-64-9	Dibenzofuran	ND	0.18	0.036	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.36	0.072	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.36	0.072	mg/kg	
84-66-2	Diethyl phthalate	ND	0.36	0.18	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.36	0.072	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.36	0.18	mg/kg	
206-44-0	Fluoranthene	ND	0.18	0.036	mg/kg	
86-73-7	Fluorene	0.269	0.18	0.036	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.18	0.036	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.18	0.036	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.18	0.036	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.043	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.18	0.036	mg/kg	
78-59-1	Isophorone	ND	0.18	0.036	mg/kg	
91-57-6	2-Methylnaphthalene	1.58	0.18	0.036	mg/kg	
91-20-3	Naphthalene	0.635	0.18	0.036	mg/kg	
98-95-3	Nitrobenzene	ND	0.18	0.036	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.18	0.036	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.072	mg/kg	
85-01-8	Phenanthrene	0.559	0.18	0.036	mg/kg	
129-00-0	Pyrene	0.0691	0.18	0.036	mg/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	0.18	0.036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	76%		40-102%
4165-62-2	Phenol-d5	74%		41-100%
118-79-6	2,4,6-Tribromophenol	72%		42-108%
4165-60-0	Nitrobenzene-d5	73%		40-105%
321-60-8	2-Fluorobiphenyl	74%		43-107%
1718-51-0	Terphenyl-d14	73%		45-119%

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Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: GP-3B	Date Sampled: 12/14/09
Lab Sample ID: F70154-3	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 91.5
Method: MADEP VPH	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037167.D	1	12/21/09	AH	n/a	n/a	GUV2135
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.59 g	5.1 ml	10.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	80.2	37	20	mg/kg	
	C9- C12 Aliphatics (Unadj.)	141	27	15	mg/kg	
	C9- C10 Aromatics (Unadj.)	109	10	5.0	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
460-00-4	BFB		116%		70-130%	
460-00-4	BFB		118%		70-130%	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: GP-3B	Date Sampled: 12/14/09
Lab Sample ID: F70154-3	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 91.5
Method: MADEP EPH REV 1.1 SW846 3545	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13542.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	11.3 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	213	19	19	mg/kg	
	C9-C18 Aliphatics	482	9.7	9.7	mg/kg	
	C19-C36 Aliphatics	57.3	9.7	9.7	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl		89%		40-140%	
321-60-8	2-Fluorobiphenyl		72%		40-140%	
580-13-2	2-Bromonaphthalene		47%		40-140%	
3386-33-2	1-Chlorooctadecane		49%		40-140%	

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-3B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-3	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	91.5
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 4.8	4.8	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17488

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-4B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-4	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	92.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062019.D	1	12/16/09	MM	n/a	n/a	VG2344
Run #2							

	Initial Weight
Run #1	4.55 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.059	0.030	mg/kg	
71-43-2	Benzene	ND	0.0059	0.0012	mg/kg	
108-86-1	Bromobenzene	ND	0.0059	0.0012	mg/kg	
74-97-5	Bromochloromethane	ND	0.0059	0.0020	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0059	0.0014	mg/kg	
75-25-2	Bromoform	ND	0.0059	0.0018	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0059	0.0017	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0059	0.0013	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0059	0.0013	mg/kg	
108-90-7	Chlorobenzene	ND	0.0059	0.0012	mg/kg	
75-00-3	Chloroethane	ND	0.0059	0.0024	mg/kg	
67-66-3	Chloroform	ND	0.0059	0.0020	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0059	0.0012	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0059	0.0012	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0059	0.0017	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0059	0.0024	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0059	0.0015	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0059	0.0017	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0059	0.0012	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0059	0.0013	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0059	0.0017	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0059	0.0012	mg/kg	
108-20-3	Di-Isopropyl ether	0.0052	0.0059	0.0023	mg/kg	J
594-20-7	2,2-Dichloropropane	ND	0.0059	0.0025	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0059	0.0012	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0059	0.0024	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0059	0.0019	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0059	0.0015	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0059	0.0012	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0059	0.0012	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0059	0.0012	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0059	0.0014	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-4B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-4	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	92.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0059	0.0012	mg/kg	
100-41-4	Ethylbenzene	0.0025	0.0059	0.0012	mg/kg	J
591-78-6	2-Hexanone	ND	0.030	0.0059	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0059	0.0013	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0059	0.0013	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.030	0.0076	mg/kg	
74-83-9	Methyl bromide	ND	0.0059	0.0026	mg/kg	
74-87-3	Methyl chloride	ND	0.0059	0.0029	mg/kg	
75-09-2	Methylene chloride	ND	0.012	0.0059	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.030	0.0099	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0059	0.0018	mg/kg	
91-20-3	Naphthalene	ND	0.0059	0.0024	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0059	0.0014	mg/kg	
100-42-5	Styrene	ND	0.0059	0.0012	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0059	0.0013	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0059	0.0021	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0059	0.0012	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0059	0.0024	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0059	0.0023	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0059	0.0024	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0059	0.0012	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0059	0.0012	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0059	0.0014	mg/kg	
108-88-3	Toluene	ND	0.0059	0.0012	mg/kg	
79-01-6	Trichloroethylene	ND	0.0059	0.0014	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0059	0.0024	mg/kg	
75-01-4	Vinyl chloride	ND	0.0059	0.0024	mg/kg	
108-05-4	Vinyl Acetate	ND	0.030	0.014	mg/kg	
1330-20-7	Xylene (total)	ND	0.018	0.0034	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-121%
2037-26-5	Toluene-D8	91%		71-130%
460-00-4	4-Bromofluorobenzene	103%		59-148%
17060-07-0	1,2-Dichloroethane-D4	110%		77-123%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-4B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-4	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	92.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		
Run #1	File ID X008999.D	DF 1	Analyzed 12/21/09
Run #2			By NAF
			Prep Date 12/16/09
			Prep Batch OP31279
			Analytical Batch SX468
	Initial Weight Run #1 30.3 g	Final Volume 1.0 ml	

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.89	0.36	mg/kg	
95-57-8	2-Chlorophenol	ND	0.18	0.036	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.036	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.036	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.036	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.89	0.36	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.36	0.11	mg/kg	
95-48-7	2-Methylphenol	ND	0.18	0.036	mg/kg	
	3&4-Methylphenol	ND	0.18	0.036	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.036	mg/kg	
100-02-7	4-Nitrophenol	ND	0.89	0.36	mg/kg	
87-86-5	Pentachlorophenol	ND	0.89	0.36	mg/kg	
108-95-2	Phenol	ND	0.18	0.036	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.036	mg/kg	
83-32-9	Acenaphthene	ND	0.18	0.036	mg/kg	
208-96-8	Acenaphthylene	ND	0.18	0.036	mg/kg	
120-12-7	Anthracene	ND	0.18	0.036	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.18	0.036	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.18	0.036	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.18	0.036	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.18	0.036	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.18	0.036	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.18	0.036	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.36	0.071	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.18	0.036	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.18	0.036	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.071	mg/kg	
218-01-9	Chrysene	ND	0.18	0.036	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.18	0.036	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.18	0.036	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.18	0.036	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.18	0.036	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-4B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-4	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	92.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.18	0.046	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.18	0.036	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.18	0.046	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.18	0.043	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.18	0.036	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.18	0.036	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.36	0.071	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.18	0.036	mg/kg	
132-64-9	Dibenzofuran	ND	0.18	0.036	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.36	0.071	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.36	0.071	mg/kg	
84-66-2	Diethyl phthalate	ND	0.36	0.18	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.36	0.071	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.36	0.18	mg/kg	
206-44-0	Fluoranthene	ND	0.18	0.036	mg/kg	
86-73-7	Fluorene	ND	0.18	0.036	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.18	0.036	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.18	0.036	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.18	0.036	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.043	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.18	0.036	mg/kg	
78-59-1	Isophorone	ND	0.18	0.036	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.18	0.036	mg/kg	
91-20-3	Naphthalene	ND	0.18	0.036	mg/kg	
98-95-3	Nitrobenzene	ND	0.18	0.036	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.18	0.036	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.071	mg/kg	
85-01-8	Phenanthrene	ND	0.18	0.036	mg/kg	
129-00-0	Pyrene	ND	0.18	0.036	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.18	0.036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	83%		40-102%
4165-62-2	Phenol-d5	81%		41-100%
118-79-6	2,4,6-Tribromophenol	83%		42-108%
4165-60-0	Nitrobenzene-d5	77%		40-105%
321-60-8	2-Fluorobiphenyl	78%		43-107%
1718-51-0	Terphenyl-d14	79%		45-119%

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-4B	Date Sampled: 12/14/09
Lab Sample ID: F70154-4	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 92.4
Method: MADEP VPH	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037168.D	1	12/21/09	AH	n/a	n/a	GUV2135
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	4.1	2.2	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3.0	1.6	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	1.1	0.55	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
460-00-4	BFB		108%		70-130%	
460-00-4	BFB		91%		70-130%	

ND = Not detected MDL - Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-4B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-4	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	92.4
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		

Run #1 ^a	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG13543.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	11.2 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	19	19	mg/kg	
	C9-C18 Aliphatics	ND	9.7	9.7	mg/kg	
	C19-C36 Aliphatics	ND	9.7	9.7	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl		75%		40-140%	
321-60-8	2-Fluorobiphenyl		70%		40-140%	
580-13-2	2-Bromonaphthalene		56%		40-140%	
3386-33-2	1-Chlorooctadecane		54%		40-140%	

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-4B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-4	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	92.4
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	4.3	4.1	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17488

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-5B	Date Sampled: 12/14/09
Lab Sample ID: F70154-5	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 90.4
Method: SW846 8260B	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062020.D	1	12/16/09	MM	n/a	n/a	VG2344
Run #2							

	Initial Weight
Run #1	5.04 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.055	0.027	mg/kg	
71-43-2	Benzene	ND	0.0055	0.0011	mg/kg	
108-86-1	Bromobenzene	ND	0.0055	0.0011	mg/kg	
74-97-5	Bromochloromethane	ND	0.0055	0.0019	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0055	0.0013	mg/kg	
75-25-2	Bromoform	ND	0.0055	0.0016	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0055	0.0015	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0055	0.0012	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0055	0.0012	mg/kg	
108-90-7	Chlorobenzene	ND	0.0055	0.0011	mg/kg	
75-00-3	Chloroethane	ND	0.0055	0.0022	mg/kg	
67-66-3	Chloroform	ND	0.0055	0.0019	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0055	0.0011	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0055	0.0011	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0055	0.0015	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0055	0.0022	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0055	0.0014	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0055	0.0015	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0055	0.0011	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0055	0.0012	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0055	0.0015	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0055	0.0011	mg/kg	
108-20-3	Di-Isopropyl ether	0.0038	0.0055	0.0021	mg/kg	J
594-20-7	2,2-Dichloropropane	ND	0.0055	0.0023	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0055	0.0011	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0055	0.0022	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0055	0.0018	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0055	0.0014	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0055	0.0011	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0055	0.0011	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0055	0.0011	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0055	0.0013	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-5B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-5	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	90.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0055	0.0011	mg/kg	
100-41-4	Ethylbenzene	ND	0.0055	0.0011	mg/kg	
591-78-6	2-Hexanone	ND	0.027	0.0055	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0055	0.0012	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0055	0.0012	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.027	0.0070	mg/kg	
74-83-9	Methyl bromide	ND	0.0055	0.0024	mg/kg	
74-87-3	Methyl chloride	ND	0.0055	0.0026	mg/kg	
75-09-2	Methylene chloride	ND	0.011	0.0055	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.027	0.0091	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0055	0.0016	mg/kg	
91-20-3	Naphthalene	ND	0.0055	0.0022	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0055	0.0013	mg/kg	
100-42-5	Styrene	ND	0.0055	0.0011	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0055	0.0012	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0055	0.0020	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0055	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0055	0.0022	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0055	0.0021	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0055	0.0022	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0055	0.0011	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0055	0.0011	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0055	0.0013	mg/kg	
108-88-3	Toluene	ND	0.0055	0.0011	mg/kg	
79-01-6	Trichloroethylene	ND	0.0055	0.0013	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0055	0.0022	mg/kg	
75-01-4	Vinyl chloride	ND	0.0055	0.0022	mg/kg	
108-05-4	Vinyl Acetate	ND	0.027	0.013	mg/kg	
1330-20-7	Xylene (total)	ND	0.016	0.0032	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-121%
2037-26-5	Toluene-D8	90%		71-130%
460-00-4	4-Bromofluorobenzene	105%		59-148%
17060-07-0	1,2-Dichloroethane-D4	112%		77-123%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID: GP-5B	Date Sampled: 12/14/09
Lab Sample ID: F70154-5	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 90.4
Method: SW846 8270C SW846 3550B	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009000.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.94	0.37	mg/kg	
95-57-8	2-Chlorophenol	ND	0.19	0.037	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.037	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.037	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.037	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.94	0.37	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.37	0.12	mg/kg	
95-48-7	2-Methylphenol	ND	0.19	0.037	mg/kg	
	3&4-Methylphenol	ND	0.19	0.037	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.037	mg/kg	
100-02-7	4-Nitrophenol	ND	0.94	0.37	mg/kg	
87-86-5	Pentachlorophenol	ND	0.94	0.37	mg/kg	
108-95-2	Phenol	ND	0.19	0.037	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.037	mg/kg	
83-32-9	Acenaphthene	ND	0.19	0.037	mg/kg	
208-96-8	Acenaphthylene	ND	0.19	0.037	mg/kg	
120-12-7	Anthracene	ND	0.19	0.037	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.19	0.037	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.19	0.037	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.19	0.037	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.19	0.037	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.19	0.037	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.19	0.037	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.37	0.075	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.19	0.037	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.19	0.037	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.075	mg/kg	
218-01-9	Chrysene	ND	0.19	0.037	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.19	0.037	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.19	0.037	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.19	0.037	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.19	0.037	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-5B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-5	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	90.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.19	0.049	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.19	0.037	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.19	0.049	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.19	0.045	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.19	0.037	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.19	0.037	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.37	0.075	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.19	0.037	mg/kg	
132-64-9	Dibenzofuran	ND	0.19	0.037	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.37	0.075	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.37	0.075	mg/kg	
84-66-2	Diethyl phthalate	ND	0.37	0.19	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.37	0.075	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.37	0.19	mg/kg	
206-44-0	Fluoranthene	ND	0.19	0.037	mg/kg	
86-73-7	Fluorene	ND	0.19	0.037	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.19	0.037	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.19	0.037	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.19	0.037	mg/kg	
67-72-1	Hexachloroethane	ND	0.19	0.045	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.19	0.037	mg/kg	
78-59-1	Isophorone	ND	0.19	0.037	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.19	0.037	mg/kg	
91-20-3	Naphthalene	ND	0.19	0.037	mg/kg	
98-95-3	Nitrobenzene	ND	0.19	0.037	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.19	0.037	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.19	0.075	mg/kg	
85-01-8	Phenanthrene	ND	0.19	0.037	mg/kg	
129-00-0	Pyrene	ND	0.19	0.037	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.19	0.037	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	81%		40-102%
4165-62-2	Phenol-d5	80%		41-100%
118-79-6	2,4,6-Tribromophenol	84%		42-108%
4165-60-0	Nitrobenzene-d5	75%		40-105%
321-60-8	2-Fluorobiphenyl	75%		43-107%
1718-51-0	Terphenyl-d14	80%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-5B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-5	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	90.4
Method:	MADEP VPH		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037194.D	1	12/22/09	AH	n/a	n/a	GUV2136
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.25 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	3.4	1.8	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	2.5	1.4	mg/kg	
	C9- C10 Aromatics (Unadj.)	0.498	0.90	0.45	mg/kg	J
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
460-00-4	BFB		119%		70-130%	
460-00-4	BFB		96%		70-130%	

ND = Not detected MDL - Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-5B	Date Sampled: 12/14/09
Lab Sample ID: F70154-5	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 90.4
Method: MADEP EPH REV 1.1 SW846 3545	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13544.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	11.6 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	19	19	mg/kg	
	C9-C18 Aliphatics	ND	9.5	9.5	mg/kg	
	C19-C36 Aliphatics	ND	9.5	9.5	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl		62%		40-140%	
321-60-8	2-Fluorobiphenyl		67%		40-140%	
580-13-2	2-Bromonaphthalene		53%		40-140%	
3386-33-2	1-Chlorooctadecane		45%		40-140%	

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-5B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-5	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	90.4
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 5.5	5.5	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17488

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-6A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-6	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H059162.D	1	12/17/09	MM	n/a	n/a	VH2210
Run #2	H059246.D	1	12/22/09	MM	n/a	n/a	VH2213

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.16 g		
Run #2	5.82 g	5.0 ml	100 uL

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0415	0.068	0.034	mg/kg	J
71-43-2	Benzene	ND	0.0068	0.0014	mg/kg	
108-86-1	Bromobenzene	ND	0.0068	0.0014	mg/kg	
74-97-5	Bromochloromethane	ND	0.0068	0.0023	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0068	0.0016	mg/kg	
75-25-2	Bromoform	ND	0.0068	0.0020	mg/kg	
104-51-8	n-Butylbenzene	0.124	0.0068	0.0019	mg/kg	
135-98-8	sec-Butylbenzene	0.0307	0.0068	0.0015	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0068	0.0015	mg/kg	
108-90-7	Chlorobenzene	ND	0.0068	0.0014	mg/kg	
75-00-3	Chloroethane	ND	0.0068	0.0027	mg/kg	
67-66-3	Chloroform	ND	0.0068	0.0023	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0068	0.0014	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0068	0.0014	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0068	0.0019	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0068	0.0027	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0068	0.0018	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0068	0.0019	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0068	0.0014	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0068	0.0015	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0068	0.0019	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0068	0.0014	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0068	0.0026	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0068	0.0029	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0068	0.0014	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0068	0.0027	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0068	0.0022	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0068	0.0018	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0068	0.0014	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0068	0.0014	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0068	0.0014	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0068	0.0016	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-6A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-6	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0068	0.0014	mg/kg	
100-41-4	Ethylbenzene	0.0503	0.0068	0.0014	mg/kg	
591-78-6	2-Hexanone	ND	0.034	0.0068	mg/kg	
98-82-8	Isopropylbenzene	0.0233	0.0068	0.0015	mg/kg	
99-87-6	p-Isopropyltoluene	0.0336	0.0068	0.0015	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.034	0.0087	mg/kg	
74-83-9	Methyl bromide	ND	0.0068	0.0030	mg/kg	
74-87-3	Methyl chloride	ND	0.0068	0.0033	mg/kg	
75-09-2	Methylene chloride	ND	0.014	0.0068	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.034	0.011	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0068	0.0020	mg/kg	
91-20-3	Naphthalene ^a	0.603 ^b	0.28	0.11	mg/kg	
103-65-1	n-Propylbenzene	0.122	0.0068	0.0016	mg/kg	
100-42-5	Styrene	ND	0.0068	0.0014	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0068	0.0015	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0068	0.0024	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0068	0.0014	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0068	0.0027	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0068	0.0026	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0068	0.0027	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	1.22 ^b	0.28	0.055	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.368 ^b	0.28	0.055	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0068	0.0016	mg/kg	
108-88-3	Toluene	ND	0.0068	0.0014	mg/kg	
79-01-6	Trichloroethylene	ND	0.0068	0.0016	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0068	0.0027	mg/kg	
75-01-4	Vinyl chloride	ND	0.0068	0.0027	mg/kg	
108-05-4	Vinyl Acetate	ND	0.034	0.016	mg/kg	
1330-20-7	Xylene (total)	0.0898	0.020	0.0039	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	96%	80-121%
2037-26-5	Toluene-D8	99%	89%	71-130%
460-00-4	4-Bromofluorobenzene	92%	88%	59-148%
17060-07-0	1,2-Dichloroethane-D4	110%	93%	77-123%

(a) CCV outside of control limits; results may be biased low.

(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

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E = Indicates value exceeds calibration range

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Report of Analysis

Page 1 of 2

Client Sample ID:	GP-6A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-6	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009001.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
Run #2							

	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.89	0.36	mg/kg	
95-57-8	2-Chlorophenol	ND	0.18	0.036	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.036	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.036	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.036	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.89	0.36	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.36	0.11	mg/kg	
95-48-7	2-Methylphenol	ND	0.18	0.036	mg/kg	
	3&4-Methylphenol	ND	0.18	0.036	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.036	mg/kg	
100-02-7	4-Nitrophenol	ND	0.89	0.36	mg/kg	
87-86-5	Pentachlorophenol	ND	0.89	0.36	mg/kg	
108-95-2	Phenol	ND	0.18	0.036	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.036	mg/kg	
83-32-9	Acenaphthene	ND	0.18	0.036	mg/kg	
208-96-8	Acenaphthylene	ND	0.18	0.036	mg/kg	
120-12-7	Anthracene	ND	0.18	0.036	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.18	0.036	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.18	0.036	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.18	0.036	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.18	0.036	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.18	0.036	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.18	0.036	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.36	0.072	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.18	0.036	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.18	0.036	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.072	mg/kg	
218-01-9	Chrysene	ND	0.18	0.036	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.18	0.036	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.18	0.036	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.18	0.036	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.18	0.036	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-6A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-6	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.18	0.046	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.18	0.036	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.18	0.046	mg/kg	
.106-46-7	1,4-Dichlorobenzene	ND	0.18	0.043	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.18	0.036	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.18	0.036	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.36	0.072	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.18	0.036	mg/kg	
132-64-9	Dibenzofuran	ND	0.18	0.036	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.36	0.072	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.36	0.072	mg/kg	
84-66-2	Diethyl phthalate	ND	0.36	0.18	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.36	0.072	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.36	0.18	mg/kg	
206-44-0	Fluoranthene	ND	0.18	0.036	mg/kg	
86-73-7	Fluorene	ND	0.18	0.036	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.18	0.036	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.18	0.036	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.18	0.036	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.043	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.18	0.036	mg/kg	
78-59-1	Isophorone	ND	0.18	0.036	mg/kg	
91-57-6	2-Methylnaphthalene	0.324	0.18	0.036	mg/kg	
91-20-3	Naphthalene	0.120	0.18	0.036	mg/kg	J
98-95-3	Nitrobenzene	ND	0.18	0.036	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.18	0.036	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.072	mg/kg	
85-01-8	Phenanthrene	ND	0.18	0.036	mg/kg	
129-00-0	Pyrene	ND	0.18	0.036	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.18	0.036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	75%		40-102%
4165-62-2	Phenol-d5	73%		41-100%
118-79-6	2,4,6-Tribromophenol	78%		42-108%
4165-60-0	Nitrobenzene-d5	70%		40-105%
321-60-8	2-Fluorobiphenyl	71%		43-107%
1718-51-0	Terphenyl-d14	72%		45-119%

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-6A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-6	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	MADEP VPH		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037201.D	1	12/22/09	AH	n/a	n/a	GUV2136
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.82 g	5.1 ml	10.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	37	20	mg/kg	
	C9- C12 Aliphatics (Unadj.)	70.6	27	15	mg/kg	
	C9- C10 Aromatics (Unadj.)	54.0	9.9	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	86%		70-130%
460-00-4	BFB	97%		70-130%

ND = Not detected MDL - Method Detection Limit

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: GP-6A	Date Sampled: 12/14/09						
Lab Sample ID: F70154-6	Date Received: 12/15/09						
Matrix: SO - Soil	Percent Solids: 88.5						
Method: MADEP EPH REV 1.1 SW846 3545							
Project: S7001; Durham, NC							
Run #1 ^a	File ID BG13546.D	DF 1	Analyzed 12/22/09	By AMA	Prep Date 12/18/09	Prep Batch M:OP20222	Analytical Batch M:GBG439
Run #2							
	Initial Weight	Final Volume					
Run #1	11.5 g	2.0 ml					
Run #2							

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	20	20	mg/kg	
	C9-C18 Aliphatics	40.9	9.8	9.8	mg/kg	
	C19-C36 Aliphatics	ND	9.8	9.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		40-140%		
321-60-8	2-Fluorobiphenyl	79%		40-140%		
580-13-2	2-Bromonaphthalene	64%		40-140%		
3386-33-2	1-Chlorooctadecane	56%		40-140%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
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 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-6A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-6	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.5
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	8.0	5.6	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17489

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-7B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-7	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062023.D	1	12/16/09	MM	n/a	n/a	VG2344

Initial Weight	
Run #1	5.44 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.055	0.027	mg/kg	
71-43-2	Benzene	ND	0.0055	0.0011	mg/kg	
108-86-1	Bromobenzene	ND	0.0055	0.0011	mg/kg	
74-97-5	Bromochloromethane	ND	0.0055	0.0019	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0055	0.0013	mg/kg	
75-25-2	Bromoform	ND	0.0055	0.0016	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0055	0.0015	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0055	0.0012	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0055	0.0012	mg/kg	
108-90-7	Chlorobenzene	ND	0.0055	0.0011	mg/kg	
75-00-3	Chloroethane	ND	0.0055	0.0022	mg/kg	
67-66-3	Chloroform	ND	0.0055	0.0019	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0055	0.0011	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0055	0.0011	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0055	0.0015	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0055	0.0022	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0055	0.0014	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0055	0.0015	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0055	0.0011	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0055	0.0012	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0055	0.0015	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0055	0.0011	mg/kg	
108-20-3	Di-Isopropyl ether	0.0034	0.0055	0.0021	mg/kg	J
594-20-7	2,2-Dichloropropane	ND	0.0055	0.0023	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0055	0.0011	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0055	0.0022	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0055	0.0018	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0055	0.0014	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0055	0.0011	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0055	0.0011	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0055	0.0011	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0055	0.0013	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	GP-7B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-7	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0055	0.0011	mg/kg	
100-41-4	Ethylbenzene	ND	0.0055	0.0011	mg/kg	
591-78-6	2-Hexanone	ND	0.027	0.0055	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0055	0.0012	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0055	0.0012	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.027	0.0070	mg/kg	
74-83-9	Methyl bromide	ND	0.0055	0.0024	mg/kg	
74-87-3	Methyl chloride	ND	0.0055	0.0026	mg/kg	
75-09-2	Methylene chloride	ND	0.011	0.0055	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.027	0.0091	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0055	0.0016	mg/kg	
91-20-3	Naphthalene	ND	0.0055	0.0022	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0055	0.0013	mg/kg	
100-42-5	Styrene	ND	0.0055	0.0011	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0055	0.0012	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0055	0.0020	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0055	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0055	0.0022	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0055	0.0021	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0055	0.0022	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0055	0.0011	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0055	0.0011	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0055	0.0013	mg/kg	
108-88-3	Toluene	ND	0.0055	0.0011	mg/kg	
79-01-6	Trichloroethylene	ND	0.0055	0.0013	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0055	0.0022	mg/kg	
75-01-4	Vinyl chloride	ND	0.0055	0.0022	mg/kg	
108-05-4	Vinyl Acetate	ND	0.027	0.013	mg/kg	
1330-20-7	Xylene (total)	ND	0.016	0.0032	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-121%
2037-26-5	Toluene-D8	89%		71-130%
460-00-4	4-Bromofluorobenzene	102%		59-148%
17060-07-0	1,2-Dichloroethane-D4	120%		77-123%

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-7B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-7	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009002.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1.0	0.40	mg/kg	
95-57-8	2-Chlorophenol	ND	0.20	0.040	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.20	0.040	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.20	0.040	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.20	0.040	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.0	0.40	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.40	0.13	mg/kg	
95-48-7	2-Methylphenol	ND	0.20	0.040	mg/kg	
	3&4-Methylphenol	ND	0.20	0.040	mg/kg	
88-75-5	2-Nitrophenol	ND	0.20	0.040	mg/kg	
100-02-7	4-Nitrophenol	ND	1.0	0.40	mg/kg	
87-86-5	Pentachlorophenol	ND	1.0	0.40	mg/kg	
108-95-2	Phenol	ND	0.20	0.040	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.20	0.040	mg/kg	
83-32-9	Acenaphthene	ND	0.20	0.040	mg/kg	
208-96-8	Acenaphthylene	ND	0.20	0.040	mg/kg	
120-12-7	Anthracene	ND	0.20	0.040	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.20	0.040	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.20	0.040	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.040	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.040	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.040	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.20	0.040	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.40	0.080	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.20	0.040	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.20	0.040	mg/kg	
106-47-8	4-Chloroaniline	ND	0.20	0.080	mg/kg	
218-01-9	Chrysene	ND	0.20	0.040	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.20	0.040	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.20	0.040	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.20	0.040	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.20	0.040	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-7B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-7	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.20	0.052	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.20	0.040	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.20	0.052	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.20	0.048	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.040	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.040	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.40	0.080	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.20	0.040	mg/kg	
132-64-9	Dibenzofuran	ND	0.20	0.040	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.40	0.080	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.40	0.080	mg/kg	
84-66-2	Diethyl phthalate	ND	0.40	0.20	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.40	0.080	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.40	0.20	mg/kg	
206-44-0	Fluoranthene	ND	0.20	0.040	mg/kg	
86-73-7	Fluorene	ND	0.20	0.040	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.20	0.040	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.20	0.040	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.20	0.040	mg/kg	
67-72-1	Hexachloroethane	ND	0.20	0.048	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.040	mg/kg	
78-59-1	Isophorone	ND	0.20	0.040	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.20	0.040	mg/kg	
91-20-3	Naphthalene	ND	0.20	0.040	mg/kg	
98-95-3	Nitrobenzene	ND	0.20	0.040	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.20	0.040	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.20	0.080	mg/kg	
85-01-8	Phenanthrene	ND	0.20	0.040	mg/kg	
129-00-0	Pyrene	ND	0.20	0.040	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.040	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	84%		40-102%
4165-62-2	Phenol-d5	83%		41-100%
118-79-6	2,4,6-Tribromophenol	86%		42-108%
4165-60-0	Nitrobenzene-d5	75%		40-105%
321-60-8	2-Fluorobiphenyl	75%		43-107%
1718-51-0	Terphenyl-d14	79%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-7B	Date Sampled: 12/14/09
Lab Sample ID: F70154-7	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 84.0
Method: MADEP VPH	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037173.D	1	12/21/09	AH	n/a	n/a	GUV2135
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.13 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5.5	2.9	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	4.0	2.2	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	1.5	0.74	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	116%		70-130%
460-00-4	BFB	98%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-7B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-7	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		
Run #1 ^a	File ID BG13547.D	DF 1	Analyzed 12/22/09
Run #2			By AMA
			Prep Date 12/18/09
			Prep Batch M:OP20222
			Analytical Batch M:GBG439
		Initial Weight	Final Volume
Run #1		11.3 g	2.0 ml
Run #2			

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	21	21	mg/kg	
	C9-C18 Aliphatics	ND	11	11	mg/kg	
	C19-C36 Aliphatics	30.3	11	11	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	70%		40-140%		
321-60-8	2-Fluorobiphenyl	71%		40-140%		
580-13-2	2-Bromonaphthalene	55%		40-140%		
3386-33-2	1-Chlorooctadecane	56%		40-140%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-7B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-7	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	84.0
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead ^a	10.3	10	mg/kg	2	12/16/09	12/17/09 RS	SW846 6010B ¹	SW846 3050B ²

- (1) Instrument QC Batch: MA7729
(2) Prep QC Batch: MP17489

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-8B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-8	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.1
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062025.D	1	12/16/09	MM	n/a	n/a	VG2344

Initial Weight	
Run #1	6.68 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.043	0.021	mg/kg	
71-43-2	Benzene	0.0038	0.0043	0.00086	mg/kg	J
108-86-1	Bromobenzene	ND	0.0043	0.00086	mg/kg	
74-97-5	Bromochloromethane	ND	0.0043	0.0015	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0043	0.0010	mg/kg	
75-25-2	Bromoform	ND	0.0043	0.0013	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0043	0.0012	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0043	0.00095	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0043	0.00095	mg/kg	
108-90-7	Chlorobenzene	ND	0.0043	0.00086	mg/kg	
75-00-3	Chloroethane	ND	0.0043	0.0017	mg/kg	
67-66-3	Chloroform	ND	0.0043	0.0015	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0043	0.00086	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0043	0.00086	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0043	0.0012	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0043	0.0017	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0043	0.0011	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0043	0.0012	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0043	0.00086	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0043	0.00095	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0043	0.0012	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0043	0.00086	mg/kg	
108-20-3	Di-Isopropyl ether	0.0027	0.0043	0.0016	mg/kg	J
594-20-7	2,2-Dichloropropane	ND	0.0043	0.0018	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0043	0.00086	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0043	0.0017	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0043	0.0014	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0043	0.0011	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0043	0.00086	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0043	0.00086	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0043	0.00086	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0043	0.0010	mg/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-8B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-8	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.1
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0043	0.00086	mg/kg	
100-41-4	Ethylbenzene	0.0030	0.0043	0.00086	mg/kg	J
591-78-6	2-Hexanone	ND	0.021	0.0043	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0043	0.00095	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0043	0.00095	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.021	0.0055	mg/kg	
74-83-9	Methyl bromide	ND	0.0043	0.0019	mg/kg	
74-87-3	Methyl chloride	ND	0.0043	0.0021	mg/kg	
75-09-2	Methylene chloride	ND	0.0086	0.0043	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.021	0.0071	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0043	0.0013	mg/kg	
91-20-3	Naphthalene	ND	0.0043	0.0017	mg/kg	
103-65-1	n-Propylbenzene	0.0022	0.0043	0.0010	mg/kg	J
100-42-5	Styrene	ND	0.0043	0.00086	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0043	0.00095	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0043	0.0015	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0043	0.00086	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0043	0.0017	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0043	0.0016	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0043	0.0017	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.0015	0.0043	0.00086	mg/kg	J
108-67-8	1,3,5-Trimethylbenzene	0.0010	0.0043	0.00086	mg/kg	J
127-18-4	Tetrachloroethylene	ND	0.0043	0.0010	mg/kg	
108-88-3	Toluene	ND	0.0043	0.00086	mg/kg	
79-01-6	Trichloroethylene	ND	0.0043	0.0010	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0043	0.0017	mg/kg	
75-01-4	Vinyl chloride	ND	0.0043	0.0017	mg/kg	
108-05-4	Vinyl Acetate	ND	0.021	0.010	mg/kg	
1330-20-7	Xylene (total)	0.0045	0.013	0.0025	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-121%
2037-26-5	Toluene-D8	91%		71-130%
460-00-4	4-Bromofluorobenzene	104%		59-148%
17060-07-0	1,2-Dichloroethane-D4	113%		77-123%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-8B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-8	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.1
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009003.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
Run #2							

	Initial Weight	Final Volume
Run #1	29.7 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.97	0.39	mg/kg	
95-57-8	2-Chlorophenol	ND	0.19	0.039	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.039	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.039	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.039	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.97	0.39	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.39	0.12	mg/kg	
95-48-7	2-Methylphenol	ND	0.19	0.039	mg/kg	
	3&4-Methylphenol	ND	0.19	0.039	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.039	mg/kg	
100-02-7	4-Nitrophenol	ND	0.97	0.39	mg/kg	
87-86-5	Pentachlorophenol	ND	0.97	0.39	mg/kg	
108-95-2	Phenol	ND	0.19	0.039	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.039	mg/kg	
83-32-9	Acenaphthene	ND	0.19	0.039	mg/kg	
208-96-8	Acenaphthylene	ND	0.19	0.039	mg/kg	
120-12-7	Anthracene	ND	0.19	0.039	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.19	0.039	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.19	0.039	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.19	0.039	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.19	0.039	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.19	0.039	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.19	0.039	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.39	0.077	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.19	0.039	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.19	0.039	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.077	mg/kg	
218-01-9	Chrysene	ND	0.19	0.039	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.19	0.039	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.19	0.039	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.19	0.039	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.19	0.039	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-8B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-8	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.1
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.19	0.050	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.19	0.039	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.19	0.050	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.19	0.046	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.19	0.039	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.19	0.039	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.39	0.077	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.19	0.039	mg/kg	
132-64-9	Dibenzofuran	ND	0.19	0.039	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.39	0.077	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.39	0.077	mg/kg	
84-66-2	Diethyl phthalate	ND	0.39	0.19	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.39	0.077	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.39	0.19	mg/kg	
206-44-0	Fluoranthene	ND	0.19	0.039	mg/kg	
86-73-7	Fluorene	ND	0.19	0.039	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.19	0.039	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.19	0.039	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.19	0.039	mg/kg	
67-72-1	Hexachloroethane	ND	0.19	0.046	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.19	0.039	mg/kg	
78-59-1	Isophorone	ND	0.19	0.039	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.19	0.039	mg/kg	
91-20-3	Naphthalene	ND	0.19	0.039	mg/kg	
98-95-3	Nitrobenzene	ND	0.19	0.039	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.19	0.039	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.19	0.077	mg/kg	
85-01-8	Phenanthrene	ND	0.19	0.039	mg/kg	
129-00-0	Pyrene	ND	0.19	0.039	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.19	0.039	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	82%		40-102%
4165-62-2	Phenol-d5	82%		41-100%
118-79-6	2,4,6-Tribromophenol	79%		42-108%
4165-60-0	Nitrobenzene-d5	73%		40-105%
321-60-8	2-Fluorobiphenyl	72%		43-107%
1718-51-0	Terphenyl-d14	70%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: GP-8B	Date Sampled: 12/14/09
Lab Sample ID: F70154-8	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 87.1
Method: MADEP VPH	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037174.D	1	12/21/09	AH	n/a	n/a	GUV2135
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.21 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	3.5	1.9	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	2.6	1.4	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	0.94	0.47	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
460-00-4	BFB		124%		70-130%	
460-00-4	BFB		105%		70-130%	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: GP-8B	Date Sampled: 12/14/09						
Lab Sample ID: F70154-8	Date Received: 12/15/09						
Matrix: SO - Soil	Percent Solids: 87.1						
Method: MADEP EPH REV 1.1 SW846 3545							
Project: S7001; Durham, NC							
Run #1 ^a	File ID BG13582.D	DF 1	Analyzed 12/23/09	By AMA	Prep Date 12/18/09	Prep Batch M:OP20222	Analytical Batch M:GBG440
Run #2							
	Initial Weight Run #1 11.2 g	Final Volume 2.0 ml					
Run #2							

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	20	20	mg/kg	
	C9-C18 Aliphatics	ND	10	10	mg/kg	
	C19-C36 Aliphatics	ND	10	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	51%		40-140%		
321-60-8	2-Fluorobiphenyl	67%		40-140%		
580-13-2	2-Bromonaphthalene	50%		40-140%		
3386-33-2	1-Chlorooctadecane	48%		40-140%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-8B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-8	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.1
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	6.7	5.5	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

- (1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17489

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-10B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-9	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.1
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H059237.D	1	12/22/09	MM	n/a	n/a	VH2213
Run #2	G0062063.D	1	12/18/09	MM	n/a	n/a	VG2346
Run #3 ^a	H059229.D	1	12/21/09	MM	n/a	n/a	VH2212

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.11 g		
Run #2	6.19 g	5.0 ml	100 ul
Run #3	5.70 g		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.069	0.035	mg/kg	
71-43-2	Benzene	ND	0.0069	0.0014	mg/kg	
108-86-1	Bromobenzene	ND	0.0069	0.0014	mg/kg	
74-97-5	Bromochloromethane	ND	0.0069	0.0023	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0069	0.0017	mg/kg	
75-25-2	Bromoform	ND	0.0069	0.0021	mg/kg	
104-51-8	n-Butylbenzene	0.209	0.0069	0.0019	mg/kg	
135-98-8	sec-Butylbenzene	0.503 ^b	0.26	0.058	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0069	0.0015	mg/kg	
108-90-7	Chlorobenzene	ND	0.0069	0.0014	mg/kg	
75-00-3	Chloroethane	ND	0.0069	0.0028	mg/kg	
67-66-3	Chloroform	ND	0.0069	0.0023	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0069	0.0014	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0069	0.0014	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0069	0.0019	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0069	0.0028	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0069	0.0018	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0069	0.0019	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0069	0.0014	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0069	0.0015	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0069	0.0019	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0069	0.0014	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0069	0.0026	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0069	0.0029	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0069	0.0014	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0069	0.0028	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0069	0.0022	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0069	0.0018	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0069	0.0014	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0069	0.0014	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 2 of 3

Client Sample ID:	GP-10B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-9	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.1
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	p-Dichlorobenzene	ND	0.0069	0.0014	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0069	0.0017	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0069	0.0014	mg/kg	
100-41-4	Ethylbenzene	0.0054	0.0069	0.0014	mg/kg	J
591-78-6	2-Hexanone	ND	0.035	0.0069	mg/kg	
98-82-8	Isopropylbenzene	0.0922	0.0069	0.0015	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0069	0.0015	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.035	0.0088	mg/kg	
74-83-9	Methyl bromide	ND	0.0069	0.0030	mg/kg	
74-87-3	Methyl chloride	ND	0.0069	0.0033	mg/kg	
75-09-2	Methylene chloride	ND	0.014	0.0069	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.035	0.011	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0069	0.0021	mg/kg	
91-20-3	Naphthalene ^c	0.0159	0.0069	0.0028	mg/kg	
103-65-1	n-Propylbenzene	0.315 ^b	0.26	0.063	mg/kg	
100-42-5	Styrene	ND	0.0069	0.0014	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0069	0.0015	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0069	0.0025	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0069	0.0014	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0069	0.0028	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0069	0.0026	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0069	0.0028	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0069	0.0014	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0069	0.0014	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0069	0.0017	mg/kg	
108-88-3	Toluene	0.0085	0.0069	0.0014	mg/kg	
79-01-6	Trichloroethylene	ND	0.0069	0.0017	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0069	0.0028	mg/kg	
75-01-4	Vinyl chloride	ND	0.0069	0.0028	mg/kg	
108-05-4	Vinyl Acetate	ND	0.035	0.017	mg/kg	
1330-20-7	Xylene (total)	0.0064	0.021	0.0040	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	107%	98%	109%	80-121%
2037-26-5	Toluene-D8	113%	92%	88%	71-130%
460-00-4	4-Bromofluorobenzene	111%	93%	76%	59-148%
17060-07-0	1,2-Dichloroethane-D4	115%	96%	125% ^d	77-123%

(a) Confirmation run for internal standard areas.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-10B
Lab Sample ID: F70154-9
Matrix: SO - Soil
Method: SW846 8260B
Project: S7001; Durham, NC

Date Sampled: 12/14/09
Date Received: 12/15/09
Percent Solids: 88.1

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
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- (b) Result is from Run# 2
- (c) CCV outside of control limits; results may be biased low.
- (d) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	GP-10B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-9	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.1
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

Run #1 ^a	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009019.D	10	12/22/09	NAF	12/16/09	OP31279	SX469
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	9.4	3.7	mg/kg	
95-57-8	2-Chlorophenol	ND	1.9	0.37	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	1.9	0.37	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.37	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	1.9	0.37	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	9.4	3.7	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	3.7	1.2	mg/kg	
95-48-7	2-Methylphenol	ND	1.9	0.37	mg/kg	
	3&4-Methylphenol	ND	1.9	0.37	mg/kg	
88-75-5	2-Nitrophenol	ND	1.9	0.37	mg/kg	
100-02-7	4-Nitrophenol	ND	9.4	3.7	mg/kg	
87-86-5	Pentachlorophenol	ND	9.4	3.7	mg/kg	
108-95-2	Phenol	ND	1.9	0.37	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	1.9	0.37	mg/kg	
83-32-9	Acenaphthene	0.581	1.9	0.37	mg/kg	J
208-96-8	Acenaphthylene	ND	1.9	0.37	mg/kg	
120-12-7	Anthracene	ND	1.9	0.37	mg/kg	
56-55-3	Benzo(a)anthracene	ND	1.9	0.37	mg/kg	
50-32-8	Benzo(a)pyrene	ND	1.9	0.37	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	1.9	0.37	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	1.9	0.37	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	1.9	0.37	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.37	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	3.7	0.75	mg/kg	
100-51-6	Benzyl Alcohol	ND	1.9	0.37	mg/kg	
91-58-7	2-Chloronaphthalene	ND	1.9	0.37	mg/kg	
106-47-8	4-Chloroaniline	ND	1.9	0.75	mg/kg	
218-01-9	Chrysene	ND	1.9	0.37	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.37	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.37	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1.9	0.37	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.37	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-10B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-9	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.1
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.9	0.49	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	1.9	0.37	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.9	0.49	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.9	0.45	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	1.9	1.9	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	1.9	0.37	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	3.7	0.75	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	1.9	0.37	mg/kg	
132-64-9	Dibenzofuran	ND	1.9	0.37	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	3.7	0.75	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	3.7	0.75	mg/kg	
84-66-2	Diethyl phthalate	ND	3.7	1.9	mg/kg	
131-11-3	Dimethyl phthalate	ND	3.7	0.75	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	3.7	1.9	mg/kg	
206-44-0	Fluoranthene	ND	1.9	0.37	mg/kg	
86-73-7	Fluorene	1.28	1.9	0.37	mg/kg	J
118-74-1	Hexachlorobenzene	ND	1.9	0.37	mg/kg	
87-68-3	Hexachlorobutadiene	ND	1.9	0.37	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1.9	0.37	mg/kg	
67-72-1	Hexachloroethane	ND	1.9	0.45	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.9	0.37	mg/kg	
78-59-1	Isophorone	ND	1.9	0.37	mg/kg	
91-57-6	2-Methylnaphthalene	ND	1.9	0.37	mg/kg	
91-20-3	Naphthalene	ND	1.9	0.37	mg/kg	
98-95-3	Nitrobenzene	ND	1.9	0.37	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.37	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1.9	0.75	mg/kg	
85-01-8	Phenanthrene	2.16	1.9	0.37	mg/kg	
129-00-0	Pyrene	1.22	1.9	0.37	mg/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.9	0.37	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	79%		40-102%
4165-62-2	Phenol-d5	82%		41-100%
118-79-6	2,4,6-Tribromophenol	80%		42-108%
4165-60-0	Nitrobenzene-d5	77%		40-105%
321-60-8	2-Fluorobiphenyl	91%		43-107%
1718-51-0	Terphenyl-d14	91%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	GP-10B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-9	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.1
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-10B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-9	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.1
Method:	MADEP VPH		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037210.D	1	12/22/09	AH	n/a	n/a	GUV2136
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.19 g	5.1 ml	10.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
C5- C8 Aliphatics (Unadj.)	ND	35	19		mg/kg	
C9- C12 Aliphatics (Unadj.)	61.5	26	14		mg/kg	
C9- C10 Aromatics (Unadj.)	55.9	9.4	4.7		mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	96%		70-130%
460-00-4	BFB	94%		70-130%

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-10B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-9	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.1
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13549.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	11.3 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	748	20	20	mg/kg	
	C9-C18 Aliphatics	1000	10	10	mg/kg	
	C19-C36 Aliphatics	196	10	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	115%		40-140%		
321-60-8	2-Fluorobiphenyl	100%		40-140%		
580-13-2	2-Bromonaphthalene	98%		40-140%		
3386-33-2	1-Chlorooctadecane	47%		40-140%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
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Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-10B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-9	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.1
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	6.0	5.7	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17489

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID:	GP-11A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-10	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062026.D	1	12/16/09	MM	n/a	n/a	VG2344
Run #2							

Initial Weight	
Run #1	3.86 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0442	0.074	0.037	mg/kg	J
71-43-2	Benzene	ND	0.0074	0.0015	mg/kg	
108-86-1	Bromobenzene	ND	0.0074	0.0015	mg/kg	
74-97-5	Bromochloromethane	ND	0.0074	0.0025	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0074	0.0018	mg/kg	
75-25-2	Bromoform	ND	0.0074	0.0022	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0074	0.0021	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0074	0.0016	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0074	0.0016	mg/kg	
108-90-7	Chlorobenzene	ND	0.0074	0.0015	mg/kg	
75-00-3	Chloroethane	ND	0.0074	0.0030	mg/kg	
67-66-3	Chloroform	ND	0.0074	0.0025	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0074	0.0015	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0074	0.0015	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0074	0.0021	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0074	0.0030	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0074	0.0019	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0074	0.0021	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0074	0.0015	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0074	0.0016	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0074	0.0021	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0074	0.0015	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0074	0.0028	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0074	0.0031	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0074	0.0015	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0074	0.0030	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0074	0.0024	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0074	0.0019	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0074	0.0015	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0074	0.0015	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0074	0.0015	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0074	0.0018	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-11A
Lab Sample ID: F70154-10
Matrix: SO - Soil
Method: SW846 8260B
Project: S7001; Durham, NC

Date Sampled: 12/14/09
Date Received: 12/15/09
Percent Solids: 87.6

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0074	0.0015	mg/kg	
100-41-4	Ethylbenzene	ND	0.0074	0.0015	mg/kg	
591-78-6	2-Hexanone	ND	0.037	0.0074	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0074	0.0016	mg/kg	
99-87-6	p-Isopropyltoluene	0.0093	0.0074	0.0016	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.037	0.0095	mg/kg	
74-83-9	Methyl bromide	ND	0.0074	0.0033	mg/kg	
74-87-3	Methyl chloride	ND	0.0074	0.0035	mg/kg	
75-09-2	Methylene chloride	ND	0.015	0.0074	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.037	0.012	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0074	0.0022	mg/kg	
91-20-3	Naphthalene	ND	0.0074	0.0030	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0074	0.0018	mg/kg	
100-42-5	Styrene	ND	0.0074	0.0015	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0074	0.0016	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0074	0.0027	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0074	0.0015	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0074	0.0030	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0074	0.0028	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0074	0.0030	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.0022	0.0074	0.0015	mg/kg	J
108-67-8	1,3,5-Trimethylbenzene	ND	0.0074	0.0015	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0074	0.0018	mg/kg	
108-88-3	Toluene	ND	0.0074	0.0015	mg/kg	
79-01-6	Trichloroethylene	ND	0.0074	0.0018	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0074	0.0030	mg/kg	
75-01-4	Vinyl chloride	ND	0.0074	0.0030	mg/kg	
108-05-4	Vinyl Acetate	ND	0.037	0.018	mg/kg	
1330-20-7	Xylene (total)	ND	0.022	0.0043	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	109%		80-121%		
2037-26-5	Toluene-D8	90%		71-130%		
460-00-4	4-Bromofluorobenzene	103%		59-148%		
17060-07-0	1,2-Dichloroethane-D4	114%		77-123%		

ND = Not detected MDL - Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID:	GP-11A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-10	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009005.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.95	0.38	mg/kg	
95-57-8	2-Chlorophenol	ND	0.19	0.038	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.038	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.038	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.038	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.95	0.38	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.38	0.12	mg/kg	
95-48-7	2-Methylphenol	ND	0.19	0.038	mg/kg	
	3&4-Methylphenol	ND	0.19	0.038	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.038	mg/kg	
100-02-7	4-Nitrophenol	ND	0.95	0.38	mg/kg	
87-86-5	Pentachlorophenol	ND	0.95	0.38	mg/kg	
108-95-2	Phenol	ND	0.19	0.038	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.038	mg/kg	
83-32-9	Acenaphthene	ND	0.19	0.038	mg/kg	
208-96-8	Acenaphthylene	ND	0.19	0.038	mg/kg	
120-12-7	Anthracene	ND	0.19	0.038	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.19	0.038	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.19	0.038	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.19	0.038	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.19	0.038	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.19	0.038	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.19	0.038	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.38	0.076	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.19	0.038	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.19	0.038	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.076	mg/kg	
218-01-9	Chrysene	ND	0.19	0.038	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.19	0.038	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.19	0.038	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.19	0.038	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.19	0.038	mg/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-11A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-10	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.19	0.049	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.19	0.038	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.19	0.049	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.19	0.046	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.19	0.038	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.19	0.038	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.38	0.076	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.19	0.038	mg/kg	
132-64-9	Dibenzofuran	ND	0.19	0.038	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.38	0.076	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.38	0.076	mg/kg	
84-66-2	Diethyl phthalate	ND	0.38	0.19	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.38	0.076	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.38	0.19	mg/kg	
206-44-0	Fluoranthene	ND	0.19	0.038	mg/kg	
86-73-7	Fluorene	ND	0.19	0.038	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.19	0.038	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.19	0.038	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.19	0.038	mg/kg	
67-72-1	Hexachloroethane	ND	0.19	0.046	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.19	0.038	mg/kg	
78-59-1	Isophorone	ND	0.19	0.038	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.19	0.038	mg/kg	
91-20-3	Naphthalene	ND	0.19	0.038	mg/kg	
98-95-3	Nitrobenzene	ND	0.19	0.038	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.19	0.038	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.19	0.076	mg/kg	
85-01-8	Phenanthrene	ND	0.19	0.038	mg/kg	
129-00-0	Pyrene	ND	0.19	0.038	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.19	0.038	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	81%		40-102%
4165-62-2	Phenol-d5	81%		41-100%
118-79-6	2,4,6-Tribromophenol	84%		42-108%
4165-60-0	Nitrobenzene-d5	76%		40-105%
321-60-8	2-Fluorobiphenyl	76%		43-107%
1718-51-0	Terphenyl-d14	79%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-11A	Date Sampled: 12/14/09
Lab Sample ID: F70154-10	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 87.6
Method: MADEP VPH	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037196.D	1	12/22/09	AH	n/a	n/a	GUV2136
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.43 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	4.9	2.6	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3.6	2.0	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	1.3	0.66	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	98%		70-130%
460-00-4	BFB	84%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-11A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-10	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13550.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	11.4 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	20	20	mg/kg	
	C9-C18 Aliphatics	ND	10	10	mg/kg	
	C19-C36 Aliphatics	ND	10	10	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl		68%		40-140%	
321-60-8	2-Fluorobiphenyl		71%		40-140%	
580-13-2	2-Bromonaphthalene		58%		40-140%	
3386-33-2	1-Chlorooctadecane		50%		40-140%	

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-11A	Date Sampled: 12/14/09
Lab Sample ID: F70154-10	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 87.6
Project: S7001; Durham, NC	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	7.2	5.2	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726

(2) Prep QC Batch: MP17489

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-13B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-11	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062027.D	1	12/16/09	MM	n/a	n/a	VG2344
Run #2							

Initial Weight	
Run #1	5.45 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.052	0.026	mg/kg	
71-43-2	Benzene	ND	0.0052	0.0010	mg/kg	
108-86-1	Bromobenzene	ND	0.0052	0.0010	mg/kg	
74-97-5	Bromochloromethane	ND	0.0052	0.0018	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0052	0.0013	mg/kg	
75-25-2	Bromoform	ND	0.0052	0.0016	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0052	0.0015	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0052	0.0012	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0052	0.0012	mg/kg	
108-90-7	Chlorobenzene	ND	0.0052	0.0010	mg/kg	
75-00-3	Chloroethane	ND	0.0052	0.0021	mg/kg	
67-66-3	Chloroform	ND	0.0052	0.0018	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0052	0.0010	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0052	0.0010	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0052	0.0015	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0052	0.0021	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0052	0.0014	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0052	0.0015	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0052	0.0010	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0052	0.0012	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0052	0.0015	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0052	0.0010	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0052	0.0020	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0052	0.0022	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0052	0.0010	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0052	0.0021	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0052	0.0017	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0052	0.0014	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0052	0.0010	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0052	0.0010	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0052	0.0010	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0052	0.0013	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-13B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-11	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0052	0.0010	mg/kg	
100-41-4	Ethylbenzene	ND	0.0052	0.0010	mg/kg	
591-78-6	2-Hexanone	ND	0.026	0.0052	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0052	0.0012	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0052	0.0012	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.026	0.0067	mg/kg	
74-83-9	Methyl bromide	ND	0.0052	0.0023	mg/kg	
74-87-3	Methyl chloride	ND	0.0052	0.0025	mg/kg	
75-09-2	Methylene chloride	ND	0.010	0.0052	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.026	0.0087	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0052	0.0016	mg/kg	
91-20-3	Naphthalene	ND	0.0052	0.0021	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0052	0.0013	mg/kg	
100-42-5	Styrene	ND	0.0052	0.0010	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0052	0.0012	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0052	0.0019	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0052	0.0010	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0052	0.0021	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0052	0.0020	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0052	0.0021	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0052	0.0010	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0052	0.0010	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0052	0.0013	mg/kg	
108-88-3	Toluene	ND	0.0052	0.0010	mg/kg	
79-01-6	Trichloroethylene	ND	0.0052	0.0013	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0052	0.0021	mg/kg	
75-01-4	Vinyl chloride	ND	0.0052	0.0021	mg/kg	
108-05-4	Vinyl Acetate	ND	0.026	0.013	mg/kg	
1330-20-7	Xylene (total)	ND	0.016	0.0030	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	109%		80-121%		
2037-26-5	Toluene-D8	91%		71-130%		
460-00-4	4-Bromofluorobenzene	101%		59-148%		
17060-07-0	1,2-Dichloroethane-D4	110%		77-123%		

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Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-13B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-11	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		
File ID	DF	Analyzed	By
Run #1 X009006.D	1	12/21/09	NAF
Run #2			
	Initial Weight	Final Volume	
Run #1 30.5 g		1.0 ml	
Run #2			

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.94	0.37	mg/kg	
95-57-8	2-Chlorophenol	ND	0.19	0.037	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.037	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.037	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.037	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.94	0.37	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.37	0.12	mg/kg	
95-48-7	2-Methylphenol	ND	0.19	0.037	mg/kg	
	3&4-Methylphenol	ND	0.19	0.037	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.037	mg/kg	
100-02-7	4-Nitrophenol	ND	0.94	0.37	mg/kg	
87-86-5	Pentachlorophenol	ND	0.94	0.37	mg/kg	
108-95-2	Phenol	ND	0.19	0.037	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.037	mg/kg	
83-32-9	Acenaphthene	ND	0.19	0.037	mg/kg	
208-96-8	Acenaphthylene	ND	0.19	0.037	mg/kg	
120-12-7	Anthracene	ND	0.19	0.037	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.19	0.037	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.19	0.037	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.19	0.037	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.19	0.037	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.19	0.037	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.19	0.037	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.37	0.075	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.19	0.037	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.19	0.037	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.075	mg/kg	
218-01-9	Chrysene	ND	0.19	0.037	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.19	0.037	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.19	0.037	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.19	0.037	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.19	0.037	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-13B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-11	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.19	0.049	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.19	0.037	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.19	0.049	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.19	0.045	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.19	0.037	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.19	0.037	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.37	0.075	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.19	0.037	mg/kg	
132-64-9	Dibenzofuran	ND	0.19	0.037	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.37	0.075	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.37	0.075	mg/kg	
84-66-2	Diethyl phthalate	ND	0.37	0.19	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.37	0.075	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.37	0.19	mg/kg	
206-44-0	Fluoranthene	ND	0.19	0.037	mg/kg	
86-73-7	Fluorene	ND	0.19	0.037	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.19	0.037	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.19	0.037	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.19	0.037	mg/kg	
67-72-1	Hexachloroethane	ND	0.19	0.045	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.19	0.037	mg/kg	
78-59-1	Isophorone	ND	0.19	0.037	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.19	0.037	mg/kg	
91-20-3	Naphthalene	ND	0.19	0.037	mg/kg	
98-95-3	Nitrobenzene	ND	0.19	0.037	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.19	0.037	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.19	0.075	mg/kg	
85-01-8	Phenanthrene	ND	0.19	0.037	mg/kg	
129-00-0	Pyrene	ND	0.19	0.037	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.19	0.037	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	71%		40-102%
4165-62-2	Phenol-d5	71%		41-100%
118-79-6	2,4,6-Tribromophenol	81%		42-108%
4165-60-0	Nitrobenzene-d5	65%		40-105%
321-60-8	2-Fluorobiphenyl	66%		43-107%
1718-51-0	Terphenyl-d14	77%		45-119%

ND = Not detected MDL - Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-13B	Date Sampled: 12/14/09						
Lab Sample ID: F70154-11	Date Received: 12/15/09						
Matrix: SO - Soil	Percent Solids: 87.5						
Method: MADEP VPH							
Project: S7001; Durham, NC							
Run #1	File ID UV037197.D	DF 1	Analyzed 12/22/09	By AH	Prep Date n/a	Prep Batch n/a	Analytical Batch GUV2136
Run #2							
	Initial Weight	Final Volume	Methanol Aliquot				
Run #1	4.45 g	5.1 ml	100 ul				
Run #2							

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	4.9	2.6	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3.6	2.0	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	1.3	0.65	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	BFB		116%	70-130%		
460-00-4	BFB		98%	70-130%		

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-13B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-11	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13551.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	11.9 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	19	19	mg/kg	
	C9-C18 Aliphatics	11.2	9.6	9.6	mg/kg	
	C19-C36 Aliphatics	ND	9.6	9.6	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl		63%		40-140%	
321-60-8	2-Fluorobiphenyl		56%		40-140%	
580-13-2	2-Bromonaphthalene		43%		40-140%	
3386-33-2	1-Chlorooctadecane		43%		40-140%	

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-13B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-11	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	87.5
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 5.5	5.5	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17489

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-14A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-12	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062028.D	1	12/16/09	MM	n/a	n/a	VG2344
Run #2							

Run #	Initial Weight
Run #1	7.47 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.040	0.020	mg/kg	
71-43-2	Benzene	ND	0.0040	0.00080	mg/kg	
108-86-1	Bromobenzene	ND	0.0040	0.00080	mg/kg	
74-97-5	Bromochloromethane	ND	0.0040	0.0014	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0040	0.00096	mg/kg	
75-25-2	Bromoform	ND	0.0040	0.0012	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0040	0.0011	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0040	0.00088	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0040	0.00088	mg/kg	
108-90-7	Chlorobenzene	ND	0.0040	0.00080	mg/kg	
75-00-3	Chloroethane	ND	0.0040	0.0016	mg/kg	
67-66-3	Chloroform	ND	0.0040	0.0014	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0040	0.00080	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0040	0.00080	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0040	0.0011	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0040	0.0016	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0040	0.0010	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0040	0.0011	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0040	0.00080	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0040	0.00088	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0040	0.0011	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0040	0.00080	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0040	0.0015	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0040	0.0017	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0040	0.00080	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0040	0.0016	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0040	0.0013	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0040	0.0010	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0040	0.00080	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0040	0.00080	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0040	0.00080	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0040	0.00096	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-14A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-12	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0040	0.00080	mg/kg	
100-41-4	Ethylbenzene	ND	0.0040	0.00080	mg/kg	
591-78-6	2-Hexanone	ND	0.020	0.0040	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0040	0.00088	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0040	0.00088	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.020	0.0051	mg/kg	
74-83-9	Methyl bromide	ND	0.0040	0.0018	mg/kg	
74-87-3	Methyl chloride	ND	0.0040	0.0019	mg/kg	
75-09-2	Methylene chloride	ND	0.0080	0.0040	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.020	0.0067	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0040	0.0012	mg/kg	
91-20-3	Naphthalene	ND	0.0040	0.0016	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0040	0.00096	mg/kg	
100-42-5	Styrene	ND	0.0040	0.00080	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0040	0.00088	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0040	0.0014	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0040	0.00080	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0040	0.0016	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0040	0.0015	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0040	0.0016	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0040	0.00080	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0040	0.00080	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0040	0.00096	mg/kg	
108-88-3	Toluene	ND	0.0040	0.00080	mg/kg	
79-01-6	Trichloroethylene	ND	0.0040	0.00096	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0040	0.0016	mg/kg	
75-01-4	Vinyl chloride	ND	0.0040	0.0016	mg/kg	
108-05-4	Vinyl Acetate	ND	0.020	0.0096	mg/kg	
1330-20-7	Xylene (total)	ND	0.012	0.0023	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-121%
2037-26-5	Toluene-D8	89%		71-130%
460-00-4	4-Bromofluorobenzene	104%		59-148%
17060-07-0	1,2-Dichloroethane-D4	112%		77-123%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-14A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-12	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009007.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
Run #2							

	Initial Weight	Final Volume
Run #1	31.8 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.94	0.38	mg/kg	
95-57-8	2-Chlorophenol	ND	0.19	0.038	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.038	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.038	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.038	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.94	0.38	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.38	0.12	mg/kg	
95-48-7	2-Methylphenol	ND	0.19	0.038	mg/kg	
	3&4-Methylphenol	ND	0.19	0.038	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.038	mg/kg	
100-02-7	4-Nitrophenol	ND	0.94	0.38	mg/kg	
87-86-5	Pentachlorophenol	ND	0.94	0.38	mg/kg	
108-95-2	Phenol	ND	0.19	0.038	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.038	mg/kg	
83-32-9	Acenaphthene	ND	0.19	0.038	mg/kg	
208-96-8	Acenaphthylene	ND	0.19	0.038	mg/kg	
120-12-7	Anthracene	ND	0.19	0.038	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.19	0.038	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.19	0.038	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.19	0.038	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.19	0.038	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.19	0.038	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.19	0.038	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.38	0.075	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.19	0.038	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.19	0.038	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.075	mg/kg	
218-01-9	Chrysene	ND	0.19	0.038	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.19	0.038	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.19	0.038	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.19	0.038	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.19	0.038	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-14A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-12	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.19	0.049	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.19	0.038	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.19	0.049	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.19	0.045	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.19	0.038	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.19	0.038	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.38	0.075	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.19	0.038	mg/kg	
132-64-9	Dibenzofuran	ND	0.19	0.038	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.38	0.075	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.38	0.075	mg/kg	
84-66-2	Diethyl phthalate	ND	0.38	0.19	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.38	0.075	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.38	0.19	mg/kg	
206-44-0	Fluoranthene	ND	0.19	0.038	mg/kg	
86-73-7	Fluorene	ND	0.19	0.038	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.19	0.038	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.19	0.038	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.19	0.038	mg/kg	
67-72-1	Hexachloroethane	ND	0.19	0.045	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.19	0.038	mg/kg	
78-59-1	Isophorone	ND	0.19	0.038	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.19	0.038	mg/kg	
91-20-3	Naphthalene	ND	0.19	0.038	mg/kg	
98-95-3	Nitrobenzene	ND	0.19	0.038	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.19	0.038	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.19	0.075	mg/kg	
85-01-8	Phenanthrene	ND	0.19	0.038	mg/kg	
129-00-0	Pyrene	ND	0.19	0.038	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.19	0.038	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	77%		40-102%
4165-62-2	Phenol-d5	74%		41-100%
118-79-6	2,4,6-Tribromophenol	76%		42-108%
4165-60-0	Nitrobenzene-d5	72%		40-105%
321-60-8	2-Fluorobiphenyl	70%		43-107%
1718-51-0	Terphenyl-d14	72%		45-119%

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Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-14A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-12	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	MADEP VPH		
Project:	S7001; Durham, NC		
Run #1	UV037198.D	DF 1	Analyzed 12/22/09
Run #2			By AH
		Prep Date n/a	Prep Batch n/a
			Analytical Batch GUV2136
Run #1	Initial Weight 4.59 g	Final Volume 5.1 ml	Methanol Aliquot 100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5.0	2.7	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3.7	2.0	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	1.3	0.67	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	BFB	101%		70-130%		
460-00-4	BFB	87%		70-130%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-14A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-12	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13715.D	1	12/29/09	AMA	12/29/09	M:OP20292	M:GBG445
Run #2 ^b	BG13552.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439

	Initial Weight	Final Volume
Run #1	11.8 g	2.0 ml
Run #2	11.6 g	2.0 ml

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	20	20	mg/kg	
	C9-C18 Aliphatics	ND	10	10	mg/kg	
	C19-C36 Aliphatics	ND	10	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	88%	29% ^c	40-140%		
321-60-8	2-Fluorobiphenyl	108%	65%	40-140%		
580-13-2	2-Bromonaphthalene	96%	43%	40-140%		
3386-33-2	1-Chlorooctadecane	56%	21% ^c	40-140%		

(a) Sample re-extracted beyond recommended holding time. Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Analysis performed at Accutest Laboratories, Marlborough, MA.

(c) Outside control limits due to possible matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-14A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-12	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	83.4
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	6.3	5.7	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726

(2) Prep QC Batch: MP17489

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-15B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-13	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	82.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0062029.D	1	12/16/09	MM	n/a	n/a	VG2344
Run #2							

	Initial Weight
Run #1	6.28 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.048	0.024	mg/kg	
71-43-2	Benzene	ND	0.0048	0.00097	mg/kg	
108-86-1	Bromobenzene	ND	0.0048	0.00097	mg/kg	
74-97-5	Bromochloromethane	ND	0.0048	0.0016	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0048	0.0012	mg/kg	
75-25-2	Bromoform	ND	0.0048	0.0014	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0048	0.0014	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0048	0.0011	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0048	0.0011	mg/kg	
108-90-7	Chlorobenzene	ND	0.0048	0.00097	mg/kg	
75-00-3	Chloroethane	ND	0.0048	0.0019	mg/kg	
67-66-3	Chloroform	ND	0.0048	0.0016	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0048	0.00097	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0048	0.00097	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0048	0.0014	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0048	0.0019	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0048	0.0013	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0048	0.0014	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0048	0.00097	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0048	0.0011	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0048	0.0014	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0048	0.00097	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0048	0.0018	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0048	0.0020	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0048	0.00097	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0048	0.0019	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0048	0.0015	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0048	0.0013	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0048	0.00097	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0048	0.00097	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0048	0.00097	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0048	0.0012	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-15B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-13	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	82.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0048	0.00097	mg/kg	
100-41-4	Ethylbenzene	ND	0.0048	0.00097	mg/kg	
591-78-6	2-Hexanone	ND	0.024	0.0048	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0048	0.0011	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0048	0.0011	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.024	0.0062	mg/kg	
74-83-9	Methyl bromide	ND	0.0048	0.0021	mg/kg	
74-87-3	Methyl chloride	ND	0.0048	0.0023	mg/kg	
75-09-2	Methylene chloride	ND	0.0097	0.0048	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.024	0.0080	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0048	0.0014	mg/kg	
91-20-3	Naphthalene	ND	0.0048	0.0019	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0048	0.0012	mg/kg	
100-42-5	Styrene	ND	0.0048	0.00097	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0048	0.0011	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0048	0.0017	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0048	0.00097	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0048	0.0019	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0048	0.0018	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0048	0.0019	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0048	0.00097	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0048	0.00097	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0048	0.0012	mg/kg	
108-88-3	Toluene	ND	0.0048	0.00097	mg/kg	
79-01-6	Trichloroethylene	ND	0.0048	0.0012	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0048	0.0019	mg/kg	
75-01-4	Vinyl chloride	ND	0.0048	0.0019	mg/kg	
108-05-4	Vinyl Acetate	ND	0.024	0.012	mg/kg	
1330-20-7	Xylene (total)	ND	0.014	0.0028	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-121%
2037-26-5	Toluene-D8	88%		71-130%
460-00-4	4-Bromofluorobenzene	99%		59-148%
17060-07-0	1,2-Dichloroethane-D4	115%		77-123%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID:	GP-15B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-13	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	82.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009008.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1.0	0.41	mg/kg	
95-57-8	2-Chlorophenol	ND	0.20	0.041	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.20	0.041	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.20	0.041	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.20	0.041	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.0	0.41	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.41	0.13	mg/kg	
95-48-7	2-Methylphenol	ND	0.20	0.041	mg/kg	
	3&4-Methylphenol	ND	0.20	0.041	mg/kg	
88-75-5	2-Nitrophenol	ND	0.20	0.041	mg/kg	
100-02-7	4-Nitrophenol	ND	1.0	0.41	mg/kg	
87-86-5	Pentachlorophenol	ND	1.0	0.41	mg/kg	
108-95-2	Phenol	ND	0.20	0.041	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.20	0.041	mg/kg	
83-32-9	Acenaphthene	ND	0.20	0.041	mg/kg	
208-96-8	Acenaphthylene	ND	0.20	0.041	mg/kg	
120-12-7	Anthracene	ND	0.20	0.041	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.20	0.041	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.20	0.041	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.041	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.041	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.041	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.20	0.041	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.41	0.081	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.20	0.041	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.20	0.041	mg/kg	
106-47-8	4-Chloroaniline	ND	0.20	0.081	mg/kg	
218-01-9	Chrysene	ND	0.20	0.041	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.20	0.041	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.20	0.041	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.20	0.041	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.20	0.041	mg/kg	

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-15B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-13	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	82.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.20	0.053	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.20	0.041	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.20	0.053	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.20	0.049	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.041	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.041	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.41	0.081	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.20	0.041	mg/kg	
132-64-9	Dibenzofuran	ND	0.20	0.041	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.41	0.081	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.41	0.081	mg/kg	
84-66-2	Diethyl phthalate	ND	0.41	0.20	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.41	0.081	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.41	0.20	mg/kg	
206-44-0	Fluoranthene	ND	0.20	0.041	mg/kg	
86-73-7	Fluorene	ND	0.20	0.041	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.20	0.041	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.20	0.041	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.20	0.041	mg/kg	
67-72-1	Hexachloroethane	ND	0.20	0.049	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.041	mg/kg	
78-59-1	Isophorone	ND	0.20	0.041	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.20	0.041	mg/kg	
91-20-3	Naphthalene	ND	0.20	0.041	mg/kg	
98-95-3	Nitrobenzene	ND	0.20	0.041	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.20	0.041	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.20	0.081	mg/kg	
85-01-8	Phenanthrene	ND	0.20	0.041	mg/kg	
129-00-0	Pyrene	ND	0.20	0.041	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.041	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	82%		40-102%
4165-62-2	Phenol-d5	82%		41-100%
118-79-6	2,4,6-Tribromophenol	84%		42-108%
4165-60-0	Nitrobenzene-d5	73%		40-105%
321-60-8	2-Fluorobiphenyl	74%		43-107%
1718-51-0	Terphenyl-d14	74%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-15B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-13	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	82.4
Method:	MADEP VPH		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037199.D	1	12/22/09	AH	n/a	n/a	GUV2136
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.04 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	3.8	2.0	mg/kg	
	C9- C12 Aliphatics (Unadj.)	2.85	2.8	1.5	mg/kg	
	C9- C10 Aromatics (Unadj.)	2.95	1.0	0.51	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	112%		70-130%
460-00-4	BFB	95%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-15B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-13	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	82.4
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		

Run #1 ^a	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG13553.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439

	Initial Weight	Final Volume
Run #1	11.6 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	21	21	mg/kg	
	C9-C18 Aliphatics	ND	10	10	mg/kg	
	C19-C36 Aliphatics	ND	10	10	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl		41%		40-140%	
321-60-8	2-Fluorobiphenyl		64%		40-140%	
580-13-2	2-Bromonaphthalene		42%		40-140%	
3386-33-2	1-Chlorooctadecane		41%		40-140%	

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
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 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID: GP-15B	Date Sampled: 12/14/09
Lab Sample ID: F70154-13	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 82.4
Project: S7001; Durham, NC	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 5.4	5.4	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17489

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-16A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-14	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.3
Method:	SW846 8260B		
Project:	S7001; Durham, NC		
Run #1	File ID H059164.D	DF 1	Analyzed 12/17/09
Run #2			By MM n/a
			Prep Date n/a
			Prep Batch n/a
			Analytical Batch VH2210
	Initial Weight		
Run #1	2.14 g		
Run #2			

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.13	0.066	mg/kg	
71-43-2	Benzene	ND	0.013	0.0026	mg/kg	
108-86-1	Bromobenzene	ND	0.013	0.0026	mg/kg	
74-97-5	Bromoform	ND	0.013	0.0045	mg/kg	
75-27-4	Bromochloromethane	ND	0.013	0.0032	mg/kg	
75-25-2	Bromodichloromethane	ND	0.013	0.0040	mg/kg	
104-51-8	n-Butylbenzene	ND	0.013	0.0037	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.013	0.0029	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.013	0.0029	mg/kg	
108-90-7	Chlorobenzene	ND	0.013	0.0026	mg/kg	
75-00-3	Chloroethane	ND	0.013	0.0053	mg/kg	
67-66-3	Chloroform	ND	0.013	0.0045	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.013	0.0026	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.013	0.0026	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.013	0.0037	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.013	0.0053	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.013	0.0034	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.013	0.0037	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.013	0.0026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.013	0.0029	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.013	0.0037	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.013	0.0026	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.013	0.0050	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.013	0.0056	mg/kg	
124-48-1	Dibromochloromethane	ND	0.013	0.0026	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.013	0.0053	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.013	0.0042	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.013	0.0034	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.013	0.0026	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.013	0.0026	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.013	0.0026	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.013	0.0032	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-16A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-14	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.3
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.013	0.0026	mg/kg	
100-41-4	Ethylbenzene	ND	0.013	0.0026	mg/kg	
591-78-6	2-Hexanone	ND	0.066	0.013	mg/kg	
98-82-8	Isopropylbenzene	ND	0.013	0.0029	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.013	0.0029	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.066	0.017	mg/kg	
74-83-9	Methyl bromide	ND	0.013	0.0058	mg/kg	
74-87-3	Methyl chloride	ND	0.013	0.0064	mg/kg	
75-09-2	Methylene chloride	ND	0.026	0.013	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.066	0.022	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.013	0.0040	mg/kg	
91-20-3	Naphthalene	ND	0.013	0.0053	mg/kg	
103-65-1	n-Propylbenzene	ND	0.013	0.0032	mg/kg	
100-42-5	Styrene	ND	0.013	0.0026	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.013	0.0029	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.013	0.0048	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.013	0.0026	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.013	0.0053	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.013	0.0050	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.013	0.0053	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.0053	0.013	0.0026	mg/kg	J
108-67-8	1,3,5-Trimethylbenzene	ND	0.013	0.0026	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.013	0.0032	mg/kg	
108-88-3	Toluene	ND	0.013	0.0026	mg/kg	
79-01-6	Trichloroethylene	ND	0.013	0.0032	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.013	0.0053	mg/kg	
75-01-4	Vinyl chloride	ND	0.013	0.0053	mg/kg	
108-05-4	Vinyl Acetate	ND	0.066	0.032	mg/kg	
1330-20-7	Xylene (total)	ND	0.040	0.0077	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-121%
2037-26-5	Toluene-D8	89%		71-130%
460-00-4	4-Bromofluorobenzene	99%		59-148%
17060-07-0	1,2-Dichloroethane-D4	111%		77-123%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID: GP-16A	Lab Sample ID: F70154-14	Date Sampled: 12/14/09					
Matrix: SO - Soil		Date Received: 12/15/09					
Method: SW846 8270C SW846 3550B		Percent Solids: 88.3					
Project: S7001; Durham, NC							
Run #1	File ID X009009.D	DF 1	Analyzed 12/21/09	By NAF	Prep Date 12/16/09	Prep Batch OP31279	Analytical Batch SX468
Run #2							
	Initial Weight Run #1 30.3 g	Final Volume 1.0 ml					
Run #2							

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.93	0.37	mg/kg	
95-57-8	2-Chlorophenol	ND	0.19	0.037	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.037	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.037	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.037	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.93	0.37	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.37	0.12	mg/kg	
95-48-7	2-Methylphenol	ND	0.19	0.037	mg/kg	
	3&4-Methylphenol	ND	0.19	0.037	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.037	mg/kg	
100-02-7	4-Nitrophenol	ND	0.93	0.37	mg/kg	
87-86-5	Pentachlorophenol	ND	0.93	0.37	mg/kg	
108-95-2	Phenol	ND	0.19	0.037	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.037	mg/kg	
83-32-9	Acenaphthene	ND	0.19	0.037	mg/kg	
208-96-8	Acenaphthylene	ND	0.19	0.037	mg/kg	
120-12-7	Anthracene	ND	0.19	0.037	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.19	0.037	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.19	0.037	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.19	0.037	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.19	0.037	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.19	0.037	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.19	0.037	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.37	0.075	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.19	0.037	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.19	0.037	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.075	mg/kg	
218-01-9	Chrysene	ND	0.19	0.037	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.19	0.037	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.19	0.037	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.19	0.037	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.19	0.037	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GP-16A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-14	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.3
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.19	0.049	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.19	0.037	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.19	0.049	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.19	0.045	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.19	0.037	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.19	0.037	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.37	0.075	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.19	0.037	mg/kg	
132-64-9	Dibenzofuran	ND	0.19	0.037	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.37	0.075	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.37	0.075	mg/kg	
84-66-2	Diethyl phthalate	ND	0.37	0.19	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.37	0.075	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.37	0.19	mg/kg	
206-44-0	Fluoranthene	ND	0.19	0.037	mg/kg	
86-73-7	Fluorene	ND	0.19	0.037	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.19	0.037	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.19	0.037	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.19	0.037	mg/kg	
67-72-1	Hexachloroethane	ND	0.19	0.045	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.19	0.037	mg/kg	
78-59-1	Isophorone	ND	0.19	0.037	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.19	0.037	mg/kg	
91-20-3	Naphthalene	ND	0.19	0.037	mg/kg	
98-95-3	Nitrobenzene	ND	0.19	0.037	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.19	0.037	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.19	0.075	mg/kg	
85-01-8	Phenanthrene	ND	0.19	0.037	mg/kg	
129-00-0	Pyrene	ND	0.19	0.037	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.19	0.037	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	85%		40-102%
4165-62-2	Phenol-d5	85%		41-100%
118-79-6	2,4,6-Tribromophenol	82%		42-108%
4165-60-0	Nitrobenzene-d5	75%		40-105%
321-60-8	2-Fluorobiphenyl	75%		43-107%
1718-51-0	Terphenyl-d14	78%		45-119%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-16A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-14	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.3
Method:	MADEP VPH		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037183.D	1	12/21/09	AH	n/a	n/a	GUV2135
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.14 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	6.9	3.7	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5.1	2.8	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	1.8	0.92	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
460-00-4	BFB		110%		70-130%	
460-00-4	BFB		93%		70-130%	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-16A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-14	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.3
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13554.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	12.0 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	19	19	mg/kg	
	C9-C18 Aliphatics	ND	9.5	9.5	mg/kg	
	C19-C36 Aliphatics	108	9.5	9.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		40-140%		
321-60-8	2-Fluorobiphenyl	66%		40-140%		
580-13-2	2-Bromonaphthalene	51%		40-140%		
3386-33-2	1-Chlorooctadecane	62%		40-140%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-16A	Date Sampled:	12/14/09
Lab Sample ID:	F70154-14	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	88.3
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	5.3	4.9	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726

(2) Prep QC Batch: MP17489

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID: GP-17B
Lab Sample ID: F70154-15
Matrix: SO - Soil
Method: SW846 8260B
Project: S7001; Durham, NC

Date Sampled: 12/14/09
Date Received: 12/15/09
Percent Solids: 86.4

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	H059165.D	1	12/17/09	MM	n/a	n/a	VH2210

Initial Weight	
Run #1	3.68 g
Run #2	

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.079	0.039	mg/kg	
71-43-2	Benzene	ND	0.0079	0.0016	mg/kg	
108-86-1	Bromobenzene	ND	0.0079	0.0016	mg/kg	
74-97-5	Bromochloromethane	ND	0.0079	0.0027	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0079	0.0019	mg/kg	
75-25-2	Bromoform	ND	0.0079	0.0024	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0079	0.0022	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0079	0.0017	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0079	0.0017	mg/kg	
108-90-7	Chlorobenzene	ND	0.0079	0.0016	mg/kg	
75-00-3	Chloroethane	ND	0.0079	0.0031	mg/kg	
67-66-3	Chloroform	ND	0.0079	0.0027	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0079	0.0016	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0079	0.0016	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0079	0.0022	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0079	0.0031	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0079	0.0020	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0079	0.0022	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0079	0.0016	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0079	0.0017	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0079	0.0022	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0079	0.0016	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0079	0.0030	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0079	0.0033	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0079	0.0016	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0079	0.0031	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0079	0.0025	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0079	0.0020	mg/kg	
541-73-1	m-Dichlorobenzene	ND	0.0079	0.0016	mg/kg	
95-50-1	o-Dichlorobenzene	ND	0.0079	0.0016	mg/kg	
106-46-7	p-Dichlorobenzene	ND	0.0079	0.0016	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0079	0.0019	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 2 of 2

Client Sample ID:	GP-17B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-15	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8260B		
Project:	S7001; Durham, NC		

VOA List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.0079	0.0016	mg/kg	
100-41-4	Ethylbenzene	ND	0.0079	0.0016	mg/kg	
591-78-6	2-Hexanone	ND	0.039	0.0079	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0079	0.0017	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0079	0.0017	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.039	0.010	mg/kg	
74-83-9	Methyl bromide	ND	0.0079	0.0035	mg/kg	
74-87-3	Methyl chloride	ND	0.0079	0.0038	mg/kg	
75-09-2	Methylene chloride	ND	0.016	0.0079	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.039	0.013	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0079	0.0024	mg/kg	
91-20-3	Naphthalene	ND	0.0079	0.0031	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0079	0.0019	mg/kg	
100-42-5	Styrene	ND	0.0079	0.0016	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0079	0.0017	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0079	0.0028	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0079	0.0016	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0079	0.0031	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0079	0.0030	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0079	0.0031	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0079	0.0016	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0079	0.0016	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0079	0.0019	mg/kg	
108-88-3	Toluene	ND	0.0079	0.0016	mg/kg	
79-01-6	Trichloroethylene	ND	0.0079	0.0019	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0079	0.0031	mg/kg	
75-01-4	Vinyl chloride	ND	0.0079	0.0031	mg/kg	
108-05-4	Vinyl Acetate	ND	0.039	0.019	mg/kg	
1330-20-7	Xylene (total)	ND	0.024	0.0046	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-121%
2037-26-5	Toluene-D8	88%		71-130%
460-00-4	4-Bromofluorobenzene	84%		59-148%
17060-07-0	1,2-Dichloroethane-D4	111%		77-123%

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	GP-17B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-15	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

Run #1 ^a	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X009020.D	4	12/22/09	NAF	12/16/09	OP31279	SX469

	Initial Weight	Final Volume
Run #1	29.6 g	1.0 ml
Run #2		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	3.9	1.6	mg/kg	
95-57-8	2-Chlorophenol	ND	0.78	0.16	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.78	0.16	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.78	0.16	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.78	0.16	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	3.9	1.6	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	1.6	0.50	mg/kg	
95-48-7	2-Methylphenol	ND	0.78	0.16	mg/kg	
	3&4-Methylphenol	ND	0.78	0.16	mg/kg	
88-75-5	2-Nitrophenol	ND	0.78	0.16	mg/kg	
100-02-7	4-Nitrophenol	ND	3.9	1.6	mg/kg	
87-86-5	Pentachlorophenol	ND	3.9	1.6	mg/kg	
108-95-2	Phenol	ND	0.78	0.16	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.78	0.16	mg/kg	
83-32-9	Acenaphthene	0.175	0.78	0.16	mg/kg	J
208-96-8	Acenaphthylene	ND	0.78	0.16	mg/kg	
120-12-7	Anthracene	ND	0.78	0.16	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.78	0.16	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.78	0.16	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.78	0.16	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.78	0.16	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.78	0.16	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.78	0.16	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	1.6	0.31	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.78	0.16	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.78	0.16	mg/kg	
106-47-8	4-Chloroaniline	ND	0.78	0.31	mg/kg	
218-01-9	Chrysene	ND	0.78	0.16	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.78	0.16	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.78	0.16	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.78	0.16	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.78	0.16	mg/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 2 of 3

Client Sample ID:	GP-17B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-15	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.78	0.20	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.78	0.16	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.78	0.20	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.78	0.19	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.78	0.16	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.78	0.16	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1.6	0.31	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.78	0.16	mg/kg	
132-64-9	Dibenzofuran	ND	0.78	0.16	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	1.6	0.31	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	1.6	0.31	mg/kg	
84-66-2	Diethyl phthalate	ND	1.6	0.78	mg/kg	
131-11-3	Dimethyl phthalate	ND	1.6	0.31	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.6	0.78	mg/kg	
206-44-0	Fluoranthene	ND	0.78	0.16	mg/kg	
86-73-7	Fluorene	0.299	0.78	0.16	mg/kg	J
118-74-1	Hexachlorobenzene	ND	0.78	0.16	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.78	0.16	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.78	0.16	mg/kg	
67-72-1	Hexachloroethane	ND	0.78	0.19	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.78	0.16	mg/kg	
78-59-1	Isophorone	ND	0.78	0.16	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.78	0.16	mg/kg	
91-20-3	Naphthalene	ND	0.78	0.16	mg/kg	
98-95-3	Nitrobenzene	ND	0.78	0.16	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.78	0.16	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.78	0.31	mg/kg	
85-01-8	Phenanthrene	0.214	0.78	0.16	mg/kg	J
129-00-0	Pyrene	0.708	0.78	0.16	mg/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	0.78	0.16	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	79%		40-102%
4165-62-2	Phenol-d5	79%		41-100%
118-79-6	2,4,6-Tribromophenol	84%		42-108%
4165-60-0	Nitrobenzene-d5	72%		40-105%
321-60-8	2-Fluorobiphenyl	86%		43-107%
1718-51-0	Terphenyl-d14	86%		45-119%

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 3 of 3

Client Sample ID:	GP-17B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-15	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8270C SW846 3550B		
Project:	S7001; Durham, NC		

ABN List for NC

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-17B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-15	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	MADEP VPH		
Project:	S7001; Durham, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV037200.D	1	12/22/09	AH	n/a	n/a	GUV2136
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.09 g	5.1 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5.4	2.9	mg/kg	
	C9- C12 Aliphatics (Unadj.)	8.97	4.0	2.2	mg/kg	
	C9- C10 Aromatics (Unadj.)	7.28	1.4	0.72	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	104%		70-130%
460-00-4	BFB	91%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: GP-17B	Date Sampled: 12/14/09
Lab Sample ID: F70154-15	Date Received: 12/15/09
Matrix: SO - Soil	Percent Solids: 86.4
Method: MADEP EPH REV 1.1 SW846 3545	
Project: S7001; Durham, NC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BG13555.D	1	12/22/09	AMA	12/18/09	M:OP20222	M:GBG439
Run #2							

	Initial Weight	Final Volume
Run #1	11.0 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	236	21	21	mg/kg	
	C9-C18 Aliphatics	332	11	11	mg/kg	
	C19-C36 Aliphatics	82.9	11	11	mg/kg	
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl		107%		40-140%	
321-60-8	2-Fluorobiphenyl		74%		40-140%	
580-13-2	2-Bromonaphthalene		66%		40-140%	
3386-33-2	1-Chlorooctadecane		51%		40-140%	

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GP-17B	Date Sampled:	12/14/09
Lab Sample ID:	F70154-15	Date Received:	12/15/09
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	S7001; Durham, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 5.6	5.6	mg/kg	1	12/16/09	12/16/09 DM	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA7726
(2) Prep QC Batch: MP17489

RL = Reporting Limit



Southeast
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Laboratories



IT'S ALL IN THE CHEMISTRY

Section 3

C3

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody



Accutest Laboratories Southeast

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL. 407-425-6700 • FAX: 407-425-0707

www.accutest.com

Accutest JOB # **F70154** PAGE 1 OF 2

Accutest Quote # **SKIFF#**

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name	Highlands Environmental Solutions	Project Name:	S7001			DW - Drinking Water	
Address	8410 N Falls of Nease Road	Street:	Denfield Road			GW - Ground Water	
City	Tykes	State:	NC			WW - Water	
Project Contact	Tyrel Dasher	E-mail:	Truman.Pharmer@comcast.net			SW - Surface Water	
Phone#	919-876-3155	Fax #				SO - Soil	
Sampler(s) Name(s) (Printed)	Tyrel Dasher	Client Purchase Order #				SL - Sludge	
						O - Oil	
						LIQ - Other Liquid	
						AIR - Air	
						SOL - Other Solid	
						WP - Wipe	
Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY	MATRIX	CONTAINER INFORMATION	LAB USE ONLY
1 GP-1B		12/16/09	8:30	T/A	SD	6	
2 GP-2B			8:35				X X X X
3 GP-3B			8:45				
4 GP-4B			9:00				
5 GP-5B			9:10				
6 GP-6A			10:00				
7 GP-7B			10:15				
8 GP-8B			10:30				
9 GP-10B			10:45				
10 GP-11A			11:00				
11 GP-13B			11:10				
12 GP-14A			11:30	V			
				V			
				V			
				V			
				V			
				V			
				V			
TURNAROUND TIME (Business Days)		Data Deliverable Information				Comments / Remarks	
Approved By: / Rush Code		<input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY) <input checked="" type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC) <input type="checkbox"/> REDIT1 (EPA LEVEL 3) <input type="checkbox"/> FULT1 (EPA LEVEL 4) <input type="checkbox"/> EDDY'S					
<input checked="" type="checkbox"/> 10 Days Standard <input type="checkbox"/> 7 Day RUSH <input checked="" type="checkbox"/> 5 Day RUSH Standard <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> OTHER							
Emergency or Rush T/A Data Available VIA Email or LabLink							
Sample Custody must be documented below each time samples change possession, including courier delivery.							
Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:		
1 Tyrel Dasher	12/16/09 8:30	2 Tru... Dasher	3	12-15-09	4 J. Lop... (ACCUTEST) 09:00		
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:		
5		6	7		8		
Lab Use Only: Custody Seal In Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 2 Cooler Temperature (s) Celsius: 4.8 50							

3.1

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F70154: Chain of Custody

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Accutest Laboratories Southeast Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # **F70154** PAGE 2 OF 2

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes										
Company Name <i>Hillbank Environmental Services</i>	Project Name: 57001	Street <i>Durham St</i>	City <i>Durham</i> State <i>NC</i>	Sample ID <i>JPH</i>	Project # <i>57001</i>	Method <i>EPA</i>	DW - Drinking Water									
Address <i>8410-A Falls of Neuse Road</i>	Zip <i>27703</i>	State <i>NC</i>	Phone <i>919-874-3155</i>	Phone <i>919-874-3155</i>	Fax #	Temp <i>Total Cold</i>	GW - Ground Water									
City <i>Raleigh</i>	State <i>NC</i>	Zip <i>27703</i>	Project Contact <i>Lee Kannan</i>	Client Purchase Order #			WW - Water									
Phone <i>919-874-3155</i>	Fax #		Email <i>lkanan@hillserv.com</i>				SW - Surface Water									
Sampler(s) Name(s) (Printed) <i>Tyral DaSheng</i>							SO - Soil									
							SL - Sludge									
							CL - Oil									
							LQ - Other Liquid									
							AIR - Air									
							SOL - Other Solid									
							WP - Wipe									
Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION	LAB USE ONLY								
13	GP-15B	12/15/09	12:00	JPH	SD	6	2	ONE	1	2	3	4	5	6	X X X X X X	
14	GP-16A		12:00													
15	GP-17B		12:55													
TURNAROUND TIME (Business Days)									Comments / Remarks							
Approved By: / Rush Code				Data Deliverable Information					Comments / Remarks							
<input checked="" type="checkbox"/> 10 Days Standard	<input type="checkbox"/> 7 Day RUSH	<input type="checkbox"/> 5 Day <i>Standard</i>	<input type="checkbox"/> 3 Day EMERGENCY	<input type="checkbox"/> 2 Day EMERGENCY	<input type="checkbox"/> 1 Day EMERGENCY	<input type="checkbox"/> OTHER	<input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY)	<input checked="" type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC)	<input type="checkbox"/> REDT1 (EPA LEVEL 3)	<input type="checkbox"/> FULT1 (EPA LEVEL 4)	<input type="checkbox"/> EDD'S					
Emergency or Rush T/A Data Available VIA Email or Lablink																
Sample Custody must be documented below each time samples change possession, including courier delivery.																
Relinquished by/Sample#:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:		
1 <i>Tyral DaSheng</i>	12-15-09	2 <i>Revert Sandy</i>				FX	12-15-09	4 <i>Carol (Accutest) 09</i>	3			7		8		
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:		
5		8														
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 2 Cooler Temperature (s) Celsius: 4.8 S.O.																

F70154: Chain of Custody

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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F70154 CLIENT: HIGHWAY BUV. S PROJECT: S7001
 DATE/TIME RECEIVED: 12-15-09 09:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 2
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 8692 9696 9281

3.1

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COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET
- WET ICE PRESENT

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

- NUMBER OF ENCORES ?
 NUMBER OF 5035 FIELD KITS ? 18+18
 NUMBER OF LAB FILTERED METALS ?

TEMPERATURE INFORMATION

- IR THERM ID 9 CORR. FACTOR +0.4
- OBSERVED TEMPS: 4.4 4.6
- CORRECTED TEMPS: 4.8 5.0

SAMPLE INFORMATION

- SAMPLE LABELS PRESENT ON ALL BOTTLES
- INCORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ID'S ON COC DO NOT MATCH LABEL
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- % SOLIDS JAR NOT RECEIVED
- 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: No DATES and TIMES on labels per Coc

TECHNICIAN SIGNATURE/DATE JC 12-15-09

REVIEWER SIGNATURE/DATE CR 12/13/09

NF 10/09

RECEIPT CONFIRMATION 100609 (2).xls

F70154: Chain of Custody

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IT'S ALL IN THE CHEMISTRY

Section 4

4

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.1.1
4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG2344-MB	G0062017.D	1	12/16/09	MM	n/a	n/a	VG2344

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-2, F70154-4, F70154-5, F70154-7, F70154-8, F70154-10, F70154-11, F70154-12, F70154-13

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	25	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.7	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/kg	
75-25-2	Bromoform	ND	5.0	1.5	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.4	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.1	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.7	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.3	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.4	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	1.9	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	2.1	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.1	ug/kg	

Method Blank Summary

Page 2 of 2

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG2344-MB	G0062017.D	1	12/16/09	MM	n/a	n/a	VG2344

4.1.1
4

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-2, F70154-4, F70154-5, F70154-7, F70154-8, F70154-10, F70154-11, F70154-12, F70154-13

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	5.0	1.1	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	6.4	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.2	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.4	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	8.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.5	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.2	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	12	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.9	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101%
2037-26-5	Toluene-D8	94%
460-00-4	4-Bromofluorobenzene	102%
17060-07-0	1,2-Dichloroethane-D4	92%
		80-121% 71-130% 59-148% 77-123%

Method Blank Summary

Page 1 of 2

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH2210-MB	H059151.D	1	12/17/09	MM	n/a	n/a	VH2210

4.1.2
4

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-1, F70154-6, F70154-14, F70154-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	25	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.7	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/kg	
75-25-2	Bromoform	ND	5.0	1.5	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.4	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.1	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.7	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.3	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.4	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	1.9	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	2.1	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.1	ug/kg	

Method Blank Summary

Page 2 of 2

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.1.2
4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH2210-MB	H059151.D	1	12/17/09	MM	n/a	n/a	VH2210

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-1, F70154-6, F70154-14, F70154-15

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	5.0	1.1	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	6.4	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.2	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.4	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	8.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.5	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.2	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	12	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.9	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101%
2037-26-5	Toluene-D8	93%
460-00-4	4-Bromofluorobenzene	99%
17060-07-0	1,2-Dichloroethane-D4	97%
		80-121%
		71-130%
		59-148%
		77-123%

Method Blank Summary

Page 1 of 2

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.1.3
4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG2346-MB	G0062060.D	1	12/18/09	MM	n/a	n/a	VG2346

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-3, F70154-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	25	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.7	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/kg	
75-25-2	Bromoform	ND	5.0	1.5	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.4	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.1	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.7	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.3	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.4	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	1.9	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	2.1	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.1	ug/kg	

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.1.3
4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG2346-MB	G0062060.D	1	12/18/09	MM	n/a	n/a	VG2346

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-3, F70154-9

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	5.0	1.1	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	6.4	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.2	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.4	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	8.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.5	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.2	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	12	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.9	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100%
2037-26-5	Toluene-D8	93%
460-00-4	4-Bromofluorobenzene	104%
17060-07-0	1,2-Dichloroethane-D4	97%
		80-121%
		71-130%
		59-148%
		77-123%

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.1.4
4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH2213-MB	H059235.D	1	12/22/09	MM	n/a	n/a	VH2213

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-6, F70154-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	25	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.7	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/kg	
75-25-2	Bromoform	ND	5.0	1.5	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.4	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.7	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.3	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.4	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	1.9	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	2.1	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.1	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.1	ug/kg	

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.1.4
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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH2213-MB	H059235.D	1	12/22/09	MM	n/a	n/a	VH2213

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-6, F70154-9

CAS No.	Compound	Result	RL	MDL	Units	Q
108-10-1	4-Methyl-2-pentanone	ND	25	6.4	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.2	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.4	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	8.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.5	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	12	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.9	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100%
2037-26-5	Toluene-D8	90%
460-00-4	4-Bromofluorobenzene	107%
17060-07-0	1,2-Dichloroethane-D4	94%
		80-121% 71-130% 59-148% 77-123%

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG2344-BS	G0062011.D	1	12/16/09	MM	n/a	n/a	VG2344

4.2.1
4

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-2, F70154-4, F70154-5, F70154-7, F70154-8, F70154-10, F70154-11, F70154-12, F70154-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	337	135	61-144
71-43-2	Benzene	50	57.2	114	78-130
108-86-1	Bromobenzene	50	55.4	111	78-123
74-97-5	Bromochloromethane	50	57.1	114	72-122
75-27-4	Bromodichloromethane	50	48.7	97	73-122
75-25-2	Bromoform	50	50.9	102	70-139
104-51-8	n-Butylbenzene	50	57.2	114	80-138
135-98-8	sec-Butylbenzene	50	58.9	118	82-132
98-06-6	tert-Butylbenzene	50	56.2	112	79-130
108-90-7	Chlorobenzene	50	59.4	119	83-122
75-00-3	Chloroethane	50	57.2	114	61-153
67-66-3	Chloroform	50	56.7	113	79-129
95-49-8	o-Chlorotoluene	50	55.7	111	77-123
106-43-4	p-Chlorotoluene	50	55.2	110	78-129
56-23-5	Carbon tetrachloride	50	67.2	134	79-135
75-34-3	1,1-Dichloroethane	50	56.7	113	77-132
75-35-4	1,1-Dichloroethylene	50	49.1	98	66-132
563-58-6	1,1-Dichloropropene	50	61.6	123	81-133
106-93-4	1,2-Dibromoethane	50	47.7	95	77-126
107-06-2	1,2-Dichloroethane	50	54.1	108	78-129
78-87-5	1,2-Dichloropropane	50	54.6	109	74-127
142-28-9	1,3-Dichloropropane	50	52.3	105	78-118
108-20-3	Di-Isopropyl ether	50	51.1	102	75-131
594-20-7	2,2-Dichloropropane	50	49.3	99	80-137
124-48-1	Dibromochloromethane	50	47.4	95	78-117
75-71-8	Dichlorodifluoromethane	50	73.3	147	35-162
156-59-2	cis-1,2-Dichloroethylene	50	55.2	110	74-123
10061-01-5	cis-1,3-Dichloropropene	50	58.4	117	79-130
541-73-1	m-Dichlorobenzene	50	58.2	116	82-126
95-50-1	o-Dichlorobenzene	50	56.1	112	83-123
106-46-7	p-Dichlorobenzene	50	59.4	119	84-124
156-60-5	trans-1,2-Dichloroethylene	50	58.2	116	77-129
10061-02-6	trans-1,3-Dichloropropene	50	51.5	103	87-131
100-41-4	Ethylbenzene	50	59.2	118	82-124
591-78-6	2-Hexanone	250	273	109	67-130
98-82-8	Isopropylbenzene	50	61.6	123	82-133

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Account: HESNCR Highlands Environmental Solutions, Inc

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4.2.1
4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG2344-BS	G0062011.D	1	12/16/09	MM	n/a	n/a	VG2344

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-2, F70154-4, F70154-5, F70154-7, F70154-8, F70154-10, F70154-11, F70154-12, F70154-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
99-87-6	p-Isopropyltoluene	50	59.2	118	82-132
108-10-1	4-Methyl-2-pentanone	250	260	104	69-125
74-83-9	Methyl bromide	50	62.1	124	60-146
74-87-3	Methyl chloride	50	59.6	119	58-163
75-09-2	Methylene chloride	50	65.7	131	62-140
78-93-3	Methyl ethyl ketone	250	291	116	66-134
1634-04-4	Methyl Tert Butyl Ether	50	52.3	105	70-131
91-20-3	Naphthalene	50	50.3	101	59-143
103-65-1	n-Propylbenzene	50	56.7	113	78-129
100-42-5	Styrene	50	57.2	114	79-123
71-55-6	1,1,1-Trichloroethane	50	61.6	123	80-133
79-34-5	1,1,2,2-Tetrachloroethane	50	50.7	101	70-128
79-00-5	1,1,2-Trichloroethane	50	48.3	97	76-118
87-61-6	1,2,3-Trichlorobenzene	50	52.3	105	78-136
96-18-4	1,2,3-Trichloropropane	50	45.3	91	74-125
120-82-1	1,2,4-Trichlorobenzene	50	58.5	117	82-137
95-63-6	1,2,4-Trimethylbenzene	50	53.5	107	77-129
108-67-8	1,3,5-Trimethylbenzene	50	55.6	111	79-129
127-18-4	Tetrachloroethylene	50	55.4	111	79-132
108-88-3	Toluene	50	56.5	113	80-123
79-01-6	Trichloroethylene	50	58.6	117	78-132
75-69-4	Trichlorofluoromethane	50	57.0	114	67-149
75-01-4	Vinyl chloride	50	60.7	121	60-145
108-05-4	Vinyl Acetate	250	194	78	25-164
1330-20-7	Xylene (total)	150	179	119	83-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	80-121%
2037-26-5	Toluene-D8	96%	71-130%
460-00-4	4-Bromofluorobenzene	100%	59-148%
17060-07-0	1,2-Dichloroethane-D4	95%	77-123%

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Account: HESNCR Highlands Environmental Solutions, Inc

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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH2210-BS	H059152.D	1	12/17/09	MM	n/a	n/a	VH2210

4.2.2
4

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-1, F70154-6, F70154-14, F70154-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	343	137	61-144
71-43-2	Benzene	50	52.4	105	78-130
108-86-1	Bromobenzene	50	50.3	101	78-123
74-97-5	Bromochloromethane	50	48.2	96	72-122
75-27-4	Bromodichloromethane	50	49.9	100	73-122
75-25-2	Bromoform	50	43.8	88	70-139
104-51-8	n-Butylbenzene	50	58.2	116	80-138
135-98-8	sec-Butylbenzene	50	55.2	110	82-132
98-06-6	tert-Butylbenzene	50	55.4	111	79-130
108-90-7	Chlorobenzene	50	55.8	112	83-122
75-00-3	Chloroethane	50	56.0	112	61-153
67-66-3	Chloroform	50	52.3	105	79-129
95-49-8	o-Chlorotoluene	50	53.9	108	77-123
106-43-4	p-Chlorotoluene	50	52.8	106	78-129
56-23-5	Carbon tetrachloride	50	52.5	105	79-135
75-34-3	1,1-Dichloroethane	50	51.7	103	77-132
75-35-4	1,1-Dichloroethylene	50	55.4	111	66-132
563-58-6	1,1-Dichloropropene	50	54.6	109	81-133
106-93-4	1,2-Dibromoethane	50	41.9	84	77-126
107-06-2	1,2-Dichloroethane	50	47.4	95	78-129
78-87-5	1,2-Dichloropropane	50	51.4	103	74-127
142-28-9	1,3-Dichloropropane	50	48.2	96	78-118
108-20-3	Di-Isopropyl ether	50	53.5	107	75-131
594-20-7	2,2-Dichloropropane	50	51.4	103	80-137
124-48-1	Dibromochloromethane	50	42.7	85	78-117
75-71-8	Dichlorodifluoromethane	50	52.5	105	35-162
156-59-2	cis-1,2-Dichloroethylene	50	50.5	101	74-123
10061-01-5	cis-1,3-Dichloropropene	50	50.4	101	79-130
541-73-1	m-Dichlorobenzene	50	57.3	115	82-126
95-50-1	o-Dichlorobenzene	50	57.3	115	83-123
106-46-7	p-Dichlorobenzene	50	56.9	114	84-124
156-60-5	trans-1,2-Dichloroethylene	50	53.5	107	77-129
10061-02-6	trans-1,3-Dichloropropene	50	49.1	98	87-131
100-41-4	Ethylbenzene	50	55.8	112	82-124
591-78-6	2-Hexanone	250	253	101	67-130
98-82-8	Isopropylbenzene	50	61.3	123	82-133

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Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH2210-BS	H059152.D	1	12/17/09	MM	n/a	n/a	VH2210

4.2.2
4

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-1, F70154-6, F70154-14, F70154-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
99-87-6	p-Isopropyltoluene	50	57.3	115	82-132
108-10-1	4-Methyl-2-pentanone	250	231	92	69-125
74-83-9	Methyl bromide	50	52.8	106	60-146
74-87-3	Methyl chloride	50	55.0	110	58-163
75-09-2	Methylene chloride	50	106	212*	62-140
78-93-3	Methyl ethyl ketone	250	257	103	66-134
1634-04-4	Methyl Tert Butyl Ether	50	48.3	97	70-131
91-20-3	Naphthalene	50	35.6	71	59-143
103-65-1	n-Propylbenzene	50	52.6	105	78-129
100-42-5	Styrene	50	47.4	95	79-123
71-55-6	1,1,1-Trichloroethane	50	52.7	105	80-133
79-34-5	1,1,2,2-Tetrachloroethane	50	47.7	95	70-128
79-00-5	1,1,2-Trichloroethane	50	49.7	99	76-118
87-61-6	1,2,3-Trichlorobenzene	50	41.4	83	78-136
96-18-4	1,2,3-Trichloropropane	50	40.2	80	74-125
120-82-1	1,2,4-Trichlorobenzene	50	45.4	91	82-137
95-63-6	1,2,4-Trimethylbenzene	50	53.9	108	77-129
108-67-8	1,3,5-Trimethylbenzene	50	52.4	105	79-129
127-18-4	Tetrachloroethylene	50	52.8	106	79-132
108-88-3	Toluene	50	53.1	106	80-123
79-01-6	Trichloroethylene	50	51.3	103	78-132
75-69-4	Trichlorofluoromethane	50	58.9	118	67-149
75-01-4	Vinyl chloride	50	50.9	102	60-145
108-05-4	Vinyl Acetate	250	324	130	25-164
1330-20-7	Xylene (total)	150	169	113	83-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	80-121%
2037-26-5	Toluene-D8	98%	71-130%
460-00-4	4-Bromofluorobenzene	91%	59-148%
17060-07-0	1,2-Dichloroethane-D4	99%	77-123%

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4.2.3
4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG2346-BS	G0062059.D	1	12/18/09	MM	n/a	n/a	VG2346

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-3, F70154-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	636	254*	61-144
71-43-2	Benzene	50	53.4	107	78-130
108-86-1	Bromobenzene	50	50.1	100	78-123
74-97-5	Bromochloromethane	50	54.1	108	72-122
75-27-4	Bromodichloromethane	50	48.0	96	73-122
75-25-2	Bromoform	50	44.8	90	70-139
104-51-8	n-Butylbenzene	50	51.1	102	80-138
135-98-8	sec-Butylbenzene	50	52.2	104	82-132
98-06-6	tert-Butylbenzene	50	49.7	99	79-130
108-90-7	Chlorobenzene	50	50.8	102	83-122
75-00-3	Chloroethane	50	56.8	114	61-153
67-66-3	Chloroform	50	53.8	108	79-129
95-49-8	o-Chlorotoluene	50	49.4	99	77-123
106-43-4	p-Chlorotoluene	50	49.5	99	78-129
56-23-5	Carbon tetrachloride	50	64.7	129	79-135
75-34-3	1,1-Dichloroethane	50	53.6	107	77-132
75-35-4	1,1-Dichloroethylene	50	39.7	79	66-132
563-58-6	1,1-Dichloropropene	50	55.7	111	81-133
106-93-4	1,2-Dibromoethane	50	43.2	86	77-126
107-06-2	1,2-Dichloroethane	50	52.9	106	78-129
78-87-5	1,2-Dichloropropane	50	51.5	103	74-127
142-28-9	1,3-Dichloropropane	50	47.2	94	78-118
108-20-3	Di-Isopropyl ether	50	51.9	104	75-131
594-20-7	2,2-Dichloropropane	50	48.1	96	80-137
124-48-1	Dibromochloromethane	50	42.2	84	78-117
75-71-8	Dichlorodifluoromethane	50	46.5	93	35-162
156-59-2	cis-1,2-Dichloroethylene	50	51.3	103	74-123
10061-01-5	cis-1,3-Dichloropropene	50	55.4	111	79-130
541-73-1	m-Dichlorobenzene	50	52.1	104	82-126
95-50-1	o-Dichlorobenzene	50	52.0	104	83-123
106-46-7	p-Dichlorobenzene	50	52.8	106	84-124
156-60-5	trans-1,2-Dichloroethylene	50	51.1	102	77-129
10061-02-6	trans-1,3-Dichloropropene	50	47.5	95	87-131
100-41-4	Ethylbenzene	50	50.7	101	82-124
591-78-6	2-Hexanone	250	340	136*	67-130
98-82-8	Isopropylbenzene	50	51.9	104	82-133

Blank Spike Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG2346-BS	G0062059.D	1	12/18/09	MM	n/a	n/a	VG2346

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-3, F70154-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
99-87-6	p-Isopropyltoluene	50	52.9	106	82-132
108-10-1	4-Methyl-2-pentanone	250	249	100	69-125
74-83-9	Methyl bromide	50	52.8	106	60-146
74-87-3	Methyl chloride	50	39.0	78	58-163
75-09-2	Methylene chloride	50	42.8	86	62-140
78-93-3	Methyl ethyl ketone	250	447	179*	66-134
1634-04-4	Methyl Tert Butyl Ether	50	55.9	112	70-131
91-20-3	Naphthalene	50	43.9	88	59-143
103-65-1	n-Propylbenzene	50	50.6	101	78-129
100-42-5	Styrene	50	50.1	100	79-123
71-55-6	1,1,1-Trichloroethane	50	56.8	114	80-133
79-34-5	1,1,2,2-Tetrachloroethane	50	48.2	96	70-128
79-00-5	1,1,2-Trichloroethane	50	42.5	85	76-118
87-61-6	1,2,3-Trichlorobenzene	50	43.2	86	78-136
96-18-4	1,2,3-Trichloropropane	50	44.2	88	74-125
120-82-1	1,2,4-Trichlorobenzene	50	48.2	96	82-137
95-63-6	1,2,4-Trimethylbenzene	50	49.0	98	77-129
108-67-8	1,3,5-Trimethylbenzene	50	50.5	101	79-129
127-18-4	Tetrachloroethylene	50	46.9	94	79-132
108-88-3	Toluene	50	48.6	97	80-123
79-01-6	Trichloroethylene	50	53.4	107	78-132
75-69-4	Trichlorofluoromethane	50	49.2	98	67-149
75-01-4	Vinyl chloride	50	49.0	98	60-145
108-05-4	Vinyl Acetate	250	191	76	25-164
1330-20-7	Xylene (total)	150	154	103	83-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	80-121%
2037-26-5	Toluene-D8	92%	71-130%
460-00-4	4-Bromofluorobenzene	98%	59-148%
17060-07-0	1,2-Dichloroethane-D4	103%	77-123%

Blank Spike Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH2213-BS	H059247.D	1	12/22/09	MM	n/a	n/a	VH2213

4.2.4
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The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-6, F70154-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	666	266*	61-144
71-43-2	Benzene	50	51.7	103	78-130
108-86-1	Bromobenzene	50	49.5	99	78-123
74-97-5	Bromochloromethane	50	53.1	106	72-122
75-27-4	Bromodichloromethane	50	51.4	103	73-122
75-25-2	Bromoform	50	35.8	72	70-139
104-51-8	n-Butylbenzene	50	51.2	102	80-138
98-06-6	tert-Butylbenzene	50	49.4	99	79-130
108-90-7	Chlorobenzene	50	52.6	105	83-122
75-00-3	Chloroethane	50	49.5	99	61-153
67-66-3	Chloroform	50	51.8	104	79-129
95-49-8	o-Chlorotoluene	50	48.1	96	77-123
106-43-4	p-Chlorotoluene	50	48.5	97	78-129
56-23-5	Carbon tetrachloride	50	51.6	103	79-135
75-34-3	1,1-Dichloroethane	50	50.5	101	77-132
75-35-4	1,1-Dichloroethylene	50	52.1	104	66-132
563-58-6	1,1-Dichloropropene	50	52.7	105	81-133
106-93-4	1,2-Dibromoethane	50	44.4	89	77-126
107-06-2	1,2-Dichloroethane	50	48.3	97	78-129
78-87-5	1,2-Dichloropropane	50	53.7	107	74-127
142-28-9	1,3-Dichloropropane	50	48.0	96	78-118
108-20-3	Di-Isopropyl ether	50	51.8	104	75-131
594-20-7	2,2-Dichloropropane	50	50.9	102	80-137
124-48-1	Dibromochloromethane	50	44.7	89	78-117
75-71-8	Dichlorodifluoromethane	50	49.1	98	35-162
156-59-2	cis-1,2-Dichloroethylene	50	51.1	102	74-123
10061-01-5	cis-1,3-Dichloropropene	50	53.1	106	79-130
541-73-1	m-Dichlorobenzene	50	55.9	112	82-126
95-50-1	o-Dichlorobenzene	50	53.9	108	83-123
106-46-7	p-Dichlorobenzene	50	54.7	109	84-124
156-60-5	trans-1,2-Dichloroethylene	50	51.4	103	77-129
10061-02-6	trans-1,3-Dichloropropene	50	47.9	96	87-131
100-41-4	Ethylbenzene	50	51.3	103	82-124
591-78-6	2-Hexanone	250	378	151*	67-130
98-82-8	Isopropylbenzene	50	59.0	118	82-133
99-87-6	p-Isopropyltoluene	50	52.2	104	82-132

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH2213-BS	H059247.D	1	12/22/09	MM	n/a	n/a	VH2213

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-6, F70154-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone	250	256	102	69-125
74-83-9	Methyl bromide	50	48.4	97	60-146
74-87-3	Methyl chloride	50	50.5	101	58-163
75-09-2	Methylene chloride	50	73.3	147*	62-140
78-93-3	Methyl ethyl ketone	250	444	178*	66-134
1634-04-4	Methyl Tert Butyl Ether	50	51.2	102	70-131
91-20-3	Naphthalene	50	39.6	79	59-143
100-42-5	Styrene	50	48.9	98	79-123
71-55-6	1,1,1-Trichloroethane	50	52.2	104	80-133
79-34-5	1,1,2,2-Tetrachloroethane	50	44.8	90	70-128
79-00-5	1,1,2-Trichloroethane	50	48.9	98	76-118
87-61-6	1,2,3-Trichlorobenzene	50	42.1	84	78-136
96-18-4	1,2,3-Trichloropropane	50	38.1	76	74-125
120-82-1	1,2,4-Trichlorobenzene	50	43.8	88	82-137
95-63-6	1,2,4-Trimethylbenzene	50	49.2	98	77-129
108-67-8	1,3,5-Trimethylbenzene	50	47.8	96	79-129
127-18-4	Tetrachloroethylene	50	53.5	107	79-132
108-88-3	Toluene	50	50.6	101	80-123
79-01-6	Trichloroethylene	50	52.9	106	78-132
75-69-4	Trichlorofluoromethane	50	54.3	109	67-149
75-01-4	Vinyl chloride	50	48.6	97	60-145
108-05-4	Vinyl Acetate	250	341	136	25-164
1330-20-7	Xylene (total)	150	159	106	83-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	80-121%
2037-26-5	Toluene-D8	94%	71-130%
460-00-4	4-Bromofluorobenzene	90%	59-148%
17060-07-0	1,2-Dichloroethane-D4	99%	77-123%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.3.1
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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F69964-1MS	G0062021.D	1	12/16/09	MM	n/a	n/a	VG2344
F69964-1MSD	G0062024.D	1	12/16/09	MM	n/a	n/a	VG2344
F69964-1 ^a	G0062022.D	1	12/16/09	MM	n/a	n/a	VG2344

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-2, F70154-4, F70154-5, F70154-7, F70154-8, F70154-10, F70154-11, F70154-12, F70154-13

CAS No.	Compound	F69964-1 ug/kg	Spike Q	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	56 U	308	236	77	225	76	5	61-144/29
71-43-2	Benzene	5.6 U	61.5	63.9	104	54.2	91	16	78-130/25
108-86-1	Bromobenzene	5.6 U	61.5	51.5	84	39.9	67*	25	78-123/30
74-97-5	Bromochloromethane	5.6 U	61.5	61.0	99	54.4	92	11	72-122/23
75-27-4	Bromodichloromethane	5.6 U	61.5	50.9	83	45.7	77	11	73-122/25
75-25-2	Bromoform	5.6 U	61.5	40.5	66*	33.5	57*	19	70-139/26
104-51-8	n-Butylbenzene	5.6 U	61.5	27.1	44*	17.5	30*	43*	80-138/31
135-98-8	sec-Butylbenzene	5.6 U	61.5	37.2	60*	24.6	41*	41*	82-132/29
98-06-6	tert-Butylbenzene	5.6 U	61.5	44.1	72*	31.1	52*	35*	79-130/29
108-90-7	Chlorobenzene	5.6 U	61.5	53.6	87	44.1	74*	19	83-122/23
75-00-3	Chloroethane	5.6 U	61.5	77.3	126	57.3	97	30	61-153/31
67-66-3	Chloroform	5.6 U	61.5	64.3	105	55.1	93	15	79-129/27
95-49-8	o-Chlorotoluene	5.6 U	61.5	46.1	75*	34.5	58*	29	77-123/31
106-43-4	p-Chlorotoluene	5.6 U	61.5	43.9	71*	33.0	56*	28	78-129/29
56-23-5	Carbon tetrachloride	5.6 U	61.5	80.2	130	64.8	109	21	79-135/29
75-34-3	1,1-Dichloroethane	5.6 U	61.5	65.5	106	55.8	94	16	77-132/26
75-35-4	1,1-Dichloroethylene	5.6 U	61.5	39.7	65*	32.6	55*	20	66-132/27
563-58-6	1,1-Dichloropropene	5.6 U	61.5	60.2	98	47.1	79*	24	81-133/26
106-93-4	1,2-Dibromoethane	5.6 U	61.5	44.3	72*	37.4	63*	17	77-126/24
107-06-2	1,2-Dichloroethane	5.6 U	61.5	58.0	94	48.7	82	17	78-129/24
78-87-5	1,2-Dichloropropane	5.6 U	61.5	61.3	100	54.9	93	11	74-127/27
142-28-9	1,3-Dichloropropane	5.6 U	61.5	51.8	84	45.4	77*	13	78-118/26
108-20-3	Di-Isopropyl ether	5.6 U	61.5	61.8	100	54.6	92	12	75-131/24
594-20-7	2,2-Dichloropropane	5.6 U	61.5	37.3	61*	34.5	58*	8	80-137/28
124-48-1	Dibromochloromethane	5.6 U	61.5	44.9	73*	39.2	66*	14	78-117/27
75-71-8	Dichlorodifluoromethane	5.6 U	61.5	27.6	45	53.5	90	64*	35-162/30
156-59-2	cis-1,2-Dichloroethylene	5.6 U	61.5	62.6	102	53.5	90	16	74-123/26
10061-01-5	cis-1,3-Dichloropropene	5.6 U	61.5	55.8	91	46.6	79	18	79-130/23
541-73-1	m-Dichlorobenzene	5.6 U	61.5	40.9	66*	30.3	51*	30*	82-126/29
95-50-1	o-Dichlorobenzene	5.6 U	61.5	38.0	62*	29.4	50*	26	83-123/28
106-46-7	p-Dichlorobenzene	5.6 U	61.5	40.8	66*	31.5	53*	26	84-124/28
156-60-5	trans-1,2-Dichloroethylene	5.6 U	61.5	62.0	101	51.1	86	19	77-129/27
10061-02-6	trans-1,3-Dichloropropene	5.6 U	61.5	48.5	79*	40.1	68*	19	87-131/27
100-41-4	Ethylbenzene	5.6 U	61.5	52.2	85	41.5	70*	23	82-124/25
591-78-6	2-Hexanone	28 U	308	189	61*	148	50*	24	67-130/29
98-82-8	Isopropylbenzene	5.6 U	61.5	47.9	78*	36.2	61*	28*	82-133/27

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F69964-1MS	G0062021.D	1	12/16/09	MM	n/a	n/a	VG2344
F69964-1MSD	G0062024.D	1	12/16/09	MM	n/a	n/a	VG2344
F69964-1 ^a	G0062022.D	1	12/16/09	MM	n/a	n/a	VG2344

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-2, F70154-4, F70154-5, F70154-7, F70154-8, F70154-10, F70154-11, F70154-12, F70154-13

CAS No.	Compound	F69964-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
99-87-6	p-Isopropyltoluene	5.6 U	61.5	37.1	60*	24.8	42*	40*	82-132/29	
108-10-1	4-Methyl-2-pentanone	28 U	308	218	71	189	64*	14	69-125/24	
74-83-9	Methyl bromide	5.6 U	61.5	70.5	115	49.1	83	36*	60-146/31	
74-87-3	Methyl chloride	5.6 U	61.5	49.9	81	46.7	79	7	58-163/26	
75-09-2	Methylene chloride	19.4	61.5	60.0	66	55.3	61*	8	62-140/25	
78-93-3	Methyl ethyl ketone	28 U	308	223	72	201	68	10	66-134/23	
1634-04-4	Methyl Tert Butyl Ether	5.6 U	61.5	52.7	86	48.7	82	8	70-131/25	
91-20-3	Naphthalene	5.6 U	61.5	15.4	25*	12.8	22*	18	59-143/31	
103-65-1	n-Propylbenzene	5.6 U	61.5	44.7	73*	31.8	54*	34*	78-129/29	
100-42-5	Styrene	5.6 U	61.5	49.9	81	40.2	68*	22	79-123/28	
71-55-6	1,1,1-Trichloroethane	5.6 U	61.5	65.0	106	51.7	87	23	80-133/27	
79-34-5	1,1,2,2-Tetrachloroethane	5.6 U	61.5	45.1	73	37.6	63*	18	70-128/30	
79-00-5	1,1,2-Trichloroethane	5.6 U	61.5	47.5	77	40.3	68*	16	76-118/28	
87-61-6	1,2,3-Trichlorobenzene	5.6 U	61.5	8.5	14*	7.2	12*	17	78-136/34	
96-18-4	1,2,3-Trichloropropane	5.6 U	61.5	40.5	66*	35.2	59*	14	74-125/30	
120-82-1	1,2,4-Trichlorobenzene	5.6 U	61.5	15.6	25*	11.3	19*	32	82-137/32	
95-63-6	1,2,4-Trimethylbenzene	5.6 U	61.5	45.7	74*	33.1	56*	32*	77-129/29	
108-67-8	1,3,5-Trimethylbenzene	5.6 U	61.5	46.6	76*	32.6	55*	35*	79-129/31	
127-18-4	Tetrachloroethylene	5.6 U	61.5	55.3	90	47.2	80	16	79-132/27	
108-88-3	Toluene	5.6 U	61.5	58.7	95	47.3	80	22	80-123/26	
79-01-6	Trichloroethylene	5.6 U	61.5	59.5	97	46.7	79	24	78-132/28	
75-69-4	Trichlorofluoromethane	5.6 U	61.5	61.7	100	53.3	90	15	67-149/29	
75-01-4	Vinyl chloride	5.6 U	61.5	69.0	112	57.5	97	18	60-145/29	
108-05-4	Vinyl Acetate	28 U	308	16.9	5*	14.8	5*	13	25-164/35	
1330-20-7	Xylene (total)	17 U	185	163	88	130	73*	23	83-127/24	

CAS No.	Surrogate Recoveries	MS	MSD	F69964-1	Limits
1868-53-7	Dibromofluoromethane	99%	102%	104%	80-121%
2037-26-5	Toluene-D8	103%	99%	92%	71-130%
460-00-4	4-Bromofluorobenzene	105%	101%	107%	59-148%
17060-07-0	1,2-Dichloroethane-D4	93%	93%	105%	77-123%

(a) Sample was prepared from a bulk container but was not preserved within 48 hours of sampling. Confirmation run.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70098-12MS	H059158.D	1	12/17/09	MM	n/a	n/a	VH2210
F70098-12MSD	H059159.D	1	12/17/09	MM	n/a	n/a	VH2210
F70098-12	H059153.D	1	12/17/09	MM	n/a	n/a	VH2210

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-1, F70154-6, F70154-14, F70154-15

CAS No.	Compound	F70098-12 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	39 U	308	218	71	218	70	0	61-144/29	
71-43-2	Benzene	3.9 U	61.7	69.1	112	62.5	100	10	78-130/25	
108-86-1	Bromobenzene	3.9 U	61.7	64.5	105	57.1	91	12	78-123/30	
74-97-5	Bromo(chloromethane)	3.9 U	61.7	55.3	90	48.6	78	13	72-122/23	
75-27-4	Bromodichloromethane	3.9 U	61.7	59.3	96	53.2	85	11	73-122/25	
75-25-2	Bromoform	3.9 U	61.7	42.9	70	40.4	65*	6	70-139/26	
104-51-8	n-Butylbenzene	3.9 U	61.7	69.4	113	63.5	101	9	80-138/31	
135-98-8	sec-Butylbenzene	3.9 U	61.7	72.3	117	65.1	104	10	82-132/29	
98-06-6	tert-Butylbenzene	3.9 U	61.7	71.8	116	65.8	105	9	79-130/29	
108-90-7	Chlorobenzene	3.9 U	61.7	68.8	112	64.2	103	7	83-122/23	
75-00-3	Chloroethane	3.9 U	61.7	68.6	111	65.4	104	5	61-153/31	
67-66-3	Chloroform	3.9 U	61.7	64.1	104	59.8	95	7	79-129/27	
95-49-8	o-Chlorotoluene	3.9 U	61.7	69.1	112	62.4	100	10	77-123/31	
106-43-4	p-Chlorotoluene	3.9 U	61.7	66.6	108	60.5	97	10	78-129/29	
56-23-5	Carbon tetrachloride	3.9 U	61.7	66.6	108	62.0	99	7	79-135/29	
75-34-3	1,1-Dichloroethane	3.9 U	61.7	66.6	108	61.0	97	9	77-132/26	
75-35-4	1,1-Dichloroethylene	3.9 U	61.7	66.7	108	64.1	102	4	66-132/27	
563-58-6	1,1-Dichloropropene	3.9 U	61.7	68.8	112	64.1	102	7	81-133/26	
106-93-4	1,2-Dibromoethane	3.9 U	61.7	44.7	72*	39.9	64*	11	77-126/24	
107-06-2	1,2-Dichloroethane	3.9 U	61.7	53.5	87	47.7	76*	11	78-129/24	
78-87-5	1,2-Dichloropropane	3.9 U	61.7	62.8	102	56.0	89	11	74-127/27	
142-28-9	1,3-Dichloropropane	3.9 U	61.7	52.5	85	45.9	73*	13	78-118/26	
108-20-3	Di-Isopropyl ether	3.9 U	61.7	61.4	100	56.7	91	8	75-131/24	
594-20-7	2,2-Dichloropropane	3.9 U	61.7	65.9	107	58.2	93	12	80-137/28	
124-48-1	Dibromochloromethane	3.9 U	61.7	45.9	74*	42.7	68*	7	78-117/27	
75-71-8	Dichlorodifluoromethane	3.9 U	61.7	60.7	98	54.4	87	11	35-162/30	
156-59-2	cis-1,2-Dichloroethylene	3.9 U	61.7	61.4	100	55.7	89	10	74-123/26	
10061-01-5	cis-1,3-Dichloropropene	3.9 U	61.7	58.2	94	52.9	84	10	79-130/23	
541-73-1	m-Dichlorobenzene	3.9 U	61.7	69.9	113	65.6	105	6	82-126/29	
95-50-1	o-Dichlorobenzene	3.9 U	61.7	65.3	106	59.8	95	9	83-123/28	
106-46-7	p-Dichlorobenzene	3.9 U	61.7	68.7	111	63.5	101	8	84-124/28	
156-60-5	trans-1,2-Dichloroethylene	3.9 U	61.7	67.1	109	62.0	99	8	77-129/27	
10061-02-6	trans-1,3-Dichloropropene	3.9 U	61.7	52.9	86*	47.2	75*	11	87-131/27	
100-41-4	Ethylbenzene	3.9 U	61.7	70.0	114	64.6	103	8	82-124/25	
591-78-6	2-Hexanone	19 U	308	194	63*	189	60*	3	67-130/29	
98-82-8	Isopropylbenzene	3.9 U	61.7	77.6	126	72.6	116	7	82-133/27	

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.3.2
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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70098-12MS	H059158.D	1	12/17/09	MM	n/a	n/a	VH2210
F70098-12MSD	H059159.D	1	12/17/09	MM	n/a	n/a	VH2210
F70098-12	H059153.D	1	12/17/09	MM	n/a	n/a	VH2210

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-1, F70154-6, F70154-14, F70154-15

CAS No.	Compound	F70098-12 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
99-87-6	p-Isopropyltoluene	3.9 U		61.7	71.6	116	66.5	106	7	82-132/29
108-10-1	4-Methyl-2-pentanone	19 U		308	206	67*	187	60*	10	69-125/24
74-83-9	Methyl bromide	3.9 U		61.7	72.8	118	64.3	103	12	60-146/31
74-87-3	Methyl chloride	3.9 U		61.7	62.3	101	62.1	99	0	58-163/26
75-09-2	Methylene chloride	7.7 U		61.7	81.4	132	79.6	127	2	62-140/25
78-93-3	Methyl ethyl ketone	19 U		308	156	51*	154	49*	1	66-134/23
1634-04-4	Methyl Tert Butyl Ether	3.9 U		61.7	48.6	79	45.0	72	8	70-131/25
91-20-3	Naphthalene	3.9 U		61.7	30.8	50*	29.3	47*	5	59-143/31
103-65-1	n-Propylbenzene	3.9 U		61.7	70.4	114	61.9	99	13	78-129/29
100-42-5	Styrene	3.9 U		61.7	59.0	96	55.0	88	7	79-123/28
71-55-6	1,1,1-Trichloroethane	3.9 U		61.7	66.9	108	61.8	99	8	80-133/27
79-34-5	1,1,2,2-Tetrachloroethane	3.9 U		61.7	48.3	78	42.5	68*	13	70-128/30
79-00-5	1,1,2-Trichloroethane	3.9 U		61.7	53.0	86	47.4	76	11	76-118/28
87-61-6	1,2,3-Trichlorobenzene	3.9 U		61.7	42.3	69*	38.9	62*	8	78-136/34
96-18-4	1,2,3-Trichloropropane	3.9 U		61.7	41.8	68*	36.5	58*	14	74-125/30
120-82-1	1,2,4-Trichlorobenzene	3.9 U		61.7	48.8	79*	44.5	71*	9	82-137/32
95-63-6	1,2,4-Trimethylbenzene	1.1 I		61.7	68.5	109	63.6	100	7	77-129/29
108-67-8	1,3,5-Trimethylbenzene	3.9 U		61.7	69.2	112	61.6	98	12	79-129/31
127-18-4	Tetrachloroethylene	3.9 U		61.7	73.0	118	68.6	110	6	79-132/27
108-88-3	Toluene	3.9 U		61.7	68.7	111	62.3	99	10	80-123/26
79-01-6	Trichloroethylene	3.9 U		61.7	66.2	107	61.4	98	8	78-132/28
75-69-4	Trichlorofluoromethane	3.9 U		61.7	74.9	121	67.5	108	10	67-149/29
75-01-4	Vinyl chloride	3.9 U		61.7	63.0	102	59.8	95	5	60-145/29
108-05-4	Vinyl Acetate	19 U		308	166	54	150	48	10	25-164/35
1330-20-7	Xylene (total)	12 U		185	209	113	195	104	7	83-127/24

CAS No.	Surrogate Recoveries	MS	MSD	F70098-12	Limits
1868-53-7	Dibromofluoromethane	96%	97%	95%	80-121%
2037-26-5	Toluene-D8	103%	99%	95%	71-130%
460-00-4	4-Bromofluorobenzene	96%	89%	97%	59-148%
17060-07-0	1,2-Dichloroethane-D4	90%	85%	86%	77-123%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70220-6MS	G0062069.D	1	12/18/09	MM	n/a	n/a	VG2346
F70220-6MSD	G0062070.D	1	12/18/09	MM	n/a	n/a	VG2346
F70220-6 ^a	G0062067.D	1	12/18/09	MM	n/a	n/a	VG2346

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-3, F70154-9

CAS No.	Compound	F70220-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	151		354	36.4	-32*	249	27*	149*	61-144/29
71-43-2	Benzene	84.9		70.9	107	31*	98.2	19*	9	78-130/25
108-86-1	Bromobenzene	ND		70.9	74.4	105	65.1	91	13	78-123/30
74-97-5	Bromoform	ND		70.9	70.4	99	66.1	92	6	72-122/23
75-27-4	Bromochloromethane	ND		70.9	61.9	87	59.2	83	4	73-122/25
75-25-2	Chlorobenzene	ND		70.9	50.9	72	50.7	71	0	70-139/26
104-51-8	Chloroform	ND		70.9	70.8	100	67.6	94	5	80-138/31
135-98-8	o-Chlorotoluene	ND		70.9	79.1	112	72.8	102	8	82-132/29
98-06-6	o-Dichlorobenzene	ND		70.9	78.1	110	71.2	99	9	79-130/29
108-90-7	p-Chlorotoluene	ND		70.9	74.7	105	75.4	105	1	83-122/23
75-00-3	o-Dichloroethane	ND		70.9	77.9	110	73.9	103	5	61-153/31
67-66-3	sec-Butylbenzene	ND		70.9	79.1	112	72.8	102	8	82-132/29
95-49-8	sec-Butylbenzene	ND		70.9	78.1	110	71.2	99	9	79-130/29
106-43-4	tert-Butylbenzene	ND		70.9	74.7	105	75.4	105	1	83-122/23
106-93-4	1,1-Dichloroethane	ND		70.9	77.4	109	71.5	100	8	77-132/26
107-06-2	1,1-Dichloroethylene	ND		70.9	48.8	69	53.5	75	9	66-132/27
124-48-1	1,2-Dibromoethane	ND		70.9	81.8	115	75.8	106	8	81-133/26
142-28-9	1,2-Dichloropropane	ND		70.9	52.4	74*	43.8	61*	18	77-126/24
142-28-9	1,3-Dichloropropane	ND		70.9	57.6	81	43.1	60*	29*	78-118/26
108-20-3	Di-Isopropyl ether	ND		70.9	69.5	98	68.1	95	2	75-131/24
594-20-7	Ethylbenzene	ND		70.9	73.0	103	66.6	93	9	80-137/28
541-73-1	1,2-Dimethylbenzene	ND		70.9	54.6	77*	39.6	55*	32*	78-117/27
156-59-2	1,2-Dichloroethylene	ND		70.9	78.3	110	88.3	123	12	35-162/30
10061-01-5	1,3-Dichloroethylene	ND		70.9	71.8	101	69.9	98	3	74-123/26
95-50-1	m-Dichlorobenzene	ND		70.9	68.2	96	67.3	94	1	79-130/23
106-46-7	p-Dichlorobenzene	ND		70.9	76.5	108	71.8	100	6	82-126/29
156-60-5	trans-1,2-Dichloroethylene	ND		70.9	76.5	108	73.6	103	4	77-129/27
10061-02-6	trans-1,3-Dichloroethylene	ND		70.9	61.0	86*	42.8	60*	35*	87-131/27
100-41-4	Ethylbenzene	9.3		70.9	81.6	102	80.3	99	2	82-124/25
591-78-6	2-Hexanone	ND		354	229	65*	252	70	10	67-130/29
98-82-8	Isopropylbenzene	ND		70.9	81.3	115	77.0	108	5	82-133/27

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

4.3.3
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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70220-6MS	G0062069.D	1	12/18/09	MM	n/a	n/a	VG2346
F70220-6MSD	G0062070.D	1	12/18/09	MM	n/a	n/a	VG2346
F70220-6 ^a	G0062067.D	1	12/18/09	MM	n/a	n/a	VG2346

The QC reported here applies to the following samples:

Method: SW846 8260B

F70154-3, F70154-9

CAS No.	Compound	F70220-6 ug/kg	Spike Q	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
99-87-6	p-Isopropyltoluene	2.2	J	70.9	80.1	110	75.9	103	5 82-132/29
108-10-1	4-Methyl-2-pentanone	ND		354	236	67*	181	51*	26* 69-125/24
74-83-9	Methyl bromide	ND		70.9	90.2	127	81.3	114	10 60-146/31
74-87-3	Methyl chloride	ND		70.9	64.0	90	67.3	94	5 58-163/26
75-09-2	Methylene chloride	35.5		70.9	65.8	43*	69.4	47*	5 62-140/25
78-93-3	Methyl ethyl ketone	ND		354	242	68	250	70	3 66-134/23
1634-04-4	Methyl Tert Butyl Ether	ND		70.9	59.4	84	61.2	86	3 70-131/25
91-20-3	Naphthalene	ND		70.9	49.6	70	53.6	75	8 59-143/31
103-65-1	n-Propylbenzene	2.3	J	70.9	76.4	105	72.0	97	6 78-129/29
100-42-5	Styrene	ND		70.9	74.1	105	69.5	97	6 79-123/28
71-55-6	1,1,1-Trichloroethane	ND		70.9	81.6	115	79.0	110	3 80-133/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		70.9	52.8	74	53.1	74	1 70-128/30
79-00-5	1,1,2-Trichloroethane	ND		70.9	54.2	76	40.6	57*	29* 76-118/28
87-61-6	1,2,3-Trichlorobenzene	ND		70.9	53.4	75*	63.5	89	17 78-136/34
96-18-4	1,2,3-Trichloropropane	ND		70.9	45.5	64*	43.6	61*	4 74-125/30
120-82-1	1,2,4-Trichlorobenzene	ND		70.9	66.2	93	68.7	96	4 82-137/32
95-63-6	1,2,4-Trimethylbenzene	4.8	J	70.9	79.4	105	75.3	99	5 77-129/29
108-67-8	1,3,5-Trimethylbenzene	5.9	J	70.9	82.9	109	77.0	99	7 79-129/31
127-18-4	Tetrachloroethylene	ND		70.9	74.5	105	52.7	74*	34* 79-132/27
108-88-3	Toluene	1.6	J	70.9	78.6	109	55.1	75*	35* 80-123/26
79-01-6	Trichloroethylene	ND		70.9	76.9	108	73.5	103	5 78-132/28
75-69-4	Trichlorofluoromethane	ND		70.9	60.0	85	64.6	90	7 67-149/29
75-01-4	Vinyl chloride	ND		70.9	60.4	85	65.2	91	8 60-145/29
108-05-4	Vinyl Acetate	ND		354	90.9	26	97.7	27	7 25-164/35
1330-20-7	Xylene (total)	5.9	J	213	242	111	235	107	3 83-127/24

CAS No.	Surrogate Recoveries	MS	MSD	F70220-6	Limits
1868-53-7	Dibromofluoromethane	98%	102%	100%	80-121%
2037-26-5	Toluene-D8	99%	74%	90%	71-130%
460-00-4	4-Bromofluorobenzene	99%	96%	96%	59-148%
17060-07-0	1,2-Dichloroethane-D4	89%	85%	106%	77-123%

(a) Sample was received in a bulk container and preserved within 48 hours of sampling.



IT'S ALL IN THE CHEMISTRY

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-MB	X008994.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	830	330	ug/kg	
95-57-8	2-Chlorophenol	ND	170	33	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	33	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	33	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	330	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	110	ug/kg	
95-48-7	2-Methylphenol	ND	170	33	ug/kg	
	3&4-Methylphenol	ND	170	33	ug/kg	
88-75-5	2-Nitrophenol	ND	170	33	ug/kg	
100-02-7	4-Nitrophenol	ND	830	330	ug/kg	
87-86-5	Pentachlorophenol	ND	830	330	ug/kg	
108-95-2	Phenol	ND	170	33	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	33	ug/kg	
83-32-9	Acenaphthene	ND	170	33	ug/kg	
208-96-8	Acenaphthylene	ND	170	33	ug/kg	
120-12-7	Anthracene	ND	170	33	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	33	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	33	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	67	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	33	ug/kg	
106-47-8	4-Chloroaniline	ND	170	67	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	33	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	33	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	33	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	33	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	43	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	33	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	43	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	40	ug/kg	

5.1.1
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Method Blank Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-MB	X008994.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

5.1.1
5

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	Result	RL	MDL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	170	33	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	33	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	67	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	33	ug/kg	
132-64-9	Dibenzofuran	ND	170	33	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	67	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	67	ug/kg	
84-66-2	Diethyl phthalate	ND	330	170	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	67	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	170	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	33	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	33	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	33	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	33	ug/kg	
67-72-1	Hexachloroethane	ND	170	40	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	33	ug/kg	
78-59-1	Isophorone	ND	170	33	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	33	ug/kg	
91-20-3	Naphthalene	ND	170	33	ug/kg	
98-95-3	Nitrobenzene	ND	170	33	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	33	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	67	ug/kg	
85-01-8	Phenanthrene	ND	170	33	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	81% 40-102%
4165-62-2	Phenol-d5	80% 41-100%
118-79-6	2,4,6-Tribromophenol	77% 42-108%
4165-60-0	Nitrobenzene-d5	77% 40-105%
321-60-8	2-Fluorobiphenyl	77% 43-107%
1718-51-0	Terphenyl-d14	78% 45-119%

Method Blank Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-MB	X009018.D	1	12/22/09	NAF	12/16/09	OP31279	SX469

5.1.2
5

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	830	330	ug/kg	
95-57-8	2-Chlorophenol	ND	170	33	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	33	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	33	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	330	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	110	ug/kg	
95-48-7	2-Methylphenol	ND	170	33	ug/kg	
	3&4-Methylphenol	ND	170	33	ug/kg	
88-75-5	2-Nitrophenol	ND	170	33	ug/kg	
100-02-7	4-Nitrophenol	ND	830	330	ug/kg	
87-86-5	Pentachlorophenol	ND	830	330	ug/kg	
108-95-2	Phenol	ND	170	33	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	33	ug/kg	
83-32-9	Acenaphthene	ND	170	33	ug/kg	
208-96-8	Acenaphthylene	ND	170	33	ug/kg	
120-12-7	Anthracene	ND	170	33	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	33	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	33	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	67	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	33	ug/kg	
106-47-8	4-Chloroaniline	ND	170	67	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	33	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	33	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	33	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	33	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	43	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	33	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	43	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	40	ug/kg	

Method Blank Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-MB	X009018.D	1	12/22/09	NAF	12/16/09	OP31279	SX469

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	Result	RL	MDL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	170	33	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	33	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	67	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	33	ug/kg	
132-64-9	Dibenzofuran	ND	170	33	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	67	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	67	ug/kg	
84-66-2	Diethyl phthalate	ND	330	170	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	67	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	170	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	33	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	33	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	33	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	33	ug/kg	
67-72-1	Hexachloroethane	ND	170	40	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	33	ug/kg	
78-59-1	Isophorone	ND	170	33	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	33	ug/kg	
91-20-3	Naphthalene	ND	170	33	ug/kg	
98-95-3	Nitrobenzene	ND	170	33	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	33	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	67	ug/kg	
85-01-8	Phenanthrene	ND	170	33	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	79% 40-102%
4165-62-2	Phenol-d5	77% 41-100%
118-79-6	2,4,6-Tribromophenol	76% 42-108%
4165-60-0	Nitrobenzene-d5	77% 40-105%
321-60-8	2-Fluorobiphenyl	77% 43-107%
1718-51-0	Terphenyl-d14	75% 45-119%

5.1.2
5

Blank Spike Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-BS	X008993.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

5.2.1
5

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic acid	3330	1710	51	44-116
95-57-8	2-Chlorophenol	1670	1400	84	54-97
59-50-7	4-Chloro-3-methyl phenol	1670	1520	91	59-102
120-83-2	2,4-Dichlorophenol	1670	1520	91	60-101
105-67-9	2,4-Dimethylphenol	1670	1170	70	49-89
51-28-5	2,4-Dinitrophenol	3330	817	25* a	39-107
534-52-1	4,6-Dinitro-o-cresol	3330	1610	48* a	58-109
95-48-7	2-Methylphenol	1670	1390	83	53-94
	3&4-Methylphenol	3330	2850	86	54-95
88-75-5	2-Nitrophenol	1670	1390	83	55-96
100-02-7	4-Nitrophenol	3330	3040	91	56-106
87-86-5	Pentachlorophenol	3330	2970	89	50-115
108-95-2	Phenol	1670	1470	88	55-99
88-06-2	2,4,6-Trichlorophenol	1670	1420	85	60-100
83-32-9	Acenaphthene	1670	1460	88	59-97
208-96-8	Acenaphthylene	1670	1380	83	58-98
120-12-7	Anthracene	1670	1350	81	61-104
56-55-3	Benzo(a)anthracene	1670	1460	88	60-106
50-32-8	Benzo(a)pyrene	1670	1410	85	59-102
205-99-2	Benzo(b)fluoranthene	1670	1460	88	60-107
191-24-2	Benzo(g,h,i)perylene	1670	1330	80	56-103
207-08-9	Benzo(k)fluoranthene	1670	1520	91	61-107
101-55-3	4-Bromophenyl phenyl ether	1670	1390	83	60-104
85-68-7	Butyl benzyl phthalate	1670	1470	88	57-110
100-51-6	Benzyl Alcohol	1670	1410	85	51-102
91-58-7	2-Chloronaphthalene	1670	1350	81	57-95
106-47-8	4-Chloroaniline	1670	1020	61	19-85
218-01-9	Chrysene	1670	1460	88	60-107
111-91-1	bis(2-Chloroethoxy)methane	1670	1430	86	51-89
111-44-4	bis(2-Chloroethyl)ether	1670	1330	80	50-96
108-60-1	bis(2-Chloroisopropyl)ether	1670	1430	86	44-94
7005-72-3	4-Chlorophenyl phenyl ether	1670	1450	87	60-101
95-50-1	1,2-Dichlorobenzene	1670	1260	76	47-91
122-66-7	1,2-Diphenylhydrazine	1670	1350	81	58-104
541-73-1	1,3-Dichlorobenzene	1670	1210	73	45-86
106-46-7	1,4-Dichlorobenzene	1670	1230	74	45-88

Blank Spike Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-BS	X008993.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

5.2.1
5

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
121-14-2	2,4-Dinitrotoluene	1670	1470	88	59-103
606-20-2	2,6-Dinitrotoluene	1670	1420	85	57-99
91-94-1	3,3'-Dichlorobenzidine	1670	931	56	34-88
53-70-3	Dibenzo(a,h)anthracene	1670	1400	84	57-105
132-64-9	Dibenzofuran	1670	1400	84	58-103
84-74-2	Di-n-butyl phthalate	1670	1480	89	59-105
117-84-0	Di-n-octyl phthalate	1670	1630	98	59-117
84-66-2	Diethyl phthalate	1670	1510	91	59-106
131-11-3	Dimethyl phthalate	1670	1470	88	60-100
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1510	91	57-111
206-44-0	Fluoranthene	1670	1490	89	60-110
86-73-7	Fluorene	1670	1510	91	60-99
118-74-1	Hexachlorobenzene	1670	1380	83	58-103
87-68-3	Hexachlorobutadiene	1670	1360	82	49-95
77-47-4	Hexachlorocyclopentadiene	1670	1360	82	36-94
67-72-1	Hexachloroethane	1670	1220	73	44-89
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1310	79	57-104
78-59-1	Isophorone	1670	1170	70	58-97
91-57-6	2-Methylnaphthalene	1670	1420	85	57-103
91-20-3	Naphthalene	1670	1380	83	54-93
98-95-3	Nitrobenzene	1670	1340	80	53-92
621-64-7	N-Nitroso-di-n-propylamine	1670	1340	80	49-94
86-30-6	N-Nitrosodiphenylamine	1670	1380	83	53-107
85-01-8	Phenanthrene	1670	1470	88	61-103
129-00-0	Pyrene	1670	1410	85	58-109
120-82-1	1,2,4-Trichlorobenzene	1670	1290	77	52-93

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	87%	40-102%
4165-62-2	Phenol-d5	86%	41-100%
118-79-6	2,4,6-Tribromophenol	83%	42-108%
4165-60-0	Nitrobenzene-d5	80%	40-105%
321-60-8	2-Fluorobiphenyl	78%	43-107%
1718-51-0	Terphenyl-d14	81%	45-119%

Blank Spike Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-BS	X008993.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

5.2.1

5

(a) Sporadic marginal failure, within limits in MS/MSD.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-MS	X009010.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
OP31279-MSD	X009011.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
F70154-14	X009009.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	F70154-14 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		3710	3480	94	3190	86	9	44-116/36
95-57-8	2-Chlorophenol	ND		1860	1430	77	1300	70	10	54-97/31
59-50-7	4-Chloro-3-methyl phenol	ND		1860	1510	81	1420	76	6	59-102/27
120-83-2	2,4-Dichlorophenol	ND		1860	1500	81	1440	77	4	60-101/30
105-67-9	2,4-Dimethylphenol	ND		1860	1160	62	1120	60	4	49-89/31
51-28-5	2,4-Dinitrophenol	ND		3710	2070	56	1740	47	17	39-107/40
534-52-1	4,6-Dinitro-o-cresol	ND		3710	2600	70	2390	64	8	58-109/37
95-48-7	2-Methylphenol	ND		1860	1420	76	1290	69	10	53-94/29
	3&4-Methylphenol	ND		3710	2900	78	2580	69	12	54-95/31
88-75-5	2-Nitrophenol	ND		1860	1360	73	1360	73	0	55-96/30
100-02-7	4-Nitrophenol	ND		3710	3160	85	2960	79	7	56-106/29
87-86-5	Pentachlorophenol	ND		3710	3300	89	3040	82	8	50-115/33
108-95-2	Phenol	ND		1860	1500	81	1370	74	9	55-99/28
88-06-2	2,4,6-Trichlorophenol	ND		1860	1420	76	1440	77	1	60-100/27
83-32-9	Acenaphthene	ND		1860	1450	78	1450	78	0	59-97/29
208-96-8	Acenaphthylene	ND		1860	1360	73	1370	74	1	58-98/30
120-12-7	Anthracene	ND		1860	1380	74	1370	74	1	61-104/29
56-55-3	Benzo(a)anthracene	ND		1860	1500	81	1510	81	1	60-106/31
50-32-8	Benzo(a)pyrene	ND		1860	1450	78	1440	77	1	59-102/32
205-99-2	Benzo(b)fluoranthene	ND		1860	1550	83	1540	83	1	60-107/31
191-24-2	Benzo(g,h,i)perylene	ND		1860	1300	70	1350	72	4	56-103/32
207-08-9	Benzo(k)fluoranthene	ND		1860	1640	88	1580	85	4	61-107/30
101-55-3	4-Bromophenyl phenyl ether	ND		1860	1420	76	1440	77	1	60-104/26
85-68-7	Butyl benzyl phthalate	ND		1860	1470	79	1510	81	3	57-110/28
100-51-6	Benzyl Alcohol	ND		1860	1380	74	1370	74	1	51-102/34
91-58-7	2-Chloronaphthalene	ND		1860	1330	72	1360	73	2	57-95/28
106-47-8	4-Chloroaniline	ND		1860	1080	58	1090	59	1	19-85/34
218-01-9	Chrysene	ND		1860	1490	80	1480	79	1	60-107/31
111-91-1	bis(2-Chloroethoxy)methane	ND		1860	1360	73	1350	72	1	51-89/30
111-44-4	bis(2-Chloroethyl)ether	ND		1860	1310	71	1240	67	5	50-96/33
108-60-1	bis(2-Chloroisopropyl)ether	ND		1860	1380	74	1290	69	7	44-94/32
7005-72-3	4-Chlorophenyl phenyl ether	ND		1860	1450	78	1440	77	1	60-101/26
95-50-1	1,2-Dichlorobenzene	ND		1860	1220	66	1150	62	6	47-91/35
122-66-7	1,2-Diphenylhydrazine	ND		1860	1330	72	1390	75	4	58-104/27
541-73-1	1,3-Dichlorobenzene	ND		1860	1140	61	1070	57	6	45-86/36
106-46-7	1,4-Dichlorobenzene	ND		1860	1170	63	1100	59	6	45-88/36

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5.1

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

5.3.1
5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31279-MS	X009010.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
OP31279-MSD	X009011.D	1	12/21/09	NAF	12/16/09	OP31279	SX468
F70154-14	X009009.D	1	12/21/09	NAF	12/16/09	OP31279	SX468

The QC reported here applies to the following samples:

Method: SW846 8270C

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	F70154-14		Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits	
		ug/kg	Q							Rec/RPD	
121-14-2	2,4-Dinitrotoluene	ND	1860	1460	79	1420	76	3	59-103/30		
606-20-2	2,6-Dinitrotoluene	ND	1860	1390	75	1380	74	1	57-99/30		
91-94-1	3,3'-Dichlorobenzidine	ND	1860	1110	60	1150	62	4	34-88/31		
53-70-3	Dibenzo(a,h)anthracene	ND	1860	1310	71	1340	72	2	57-105/29		
132-64-9	Dibenzofuran	ND	1860	1350	73	1420	76	5	58-103/27		
84-74-2	Di-n-butyl phthalate	ND	1860	1480	80	1460	78	1	59-105/27		
117-84-0	Di-n-octyl phthalate	ND	1860	1810	97	1710	92	6	59-117/28		
84-66-2	Diethyl phthalate	ND	1860	1480	80	1450	78	2	59-106/27		
131-11-3	Dimethyl phthalate	ND	1860	1420	76	1430	77	1	60-100/26		
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1860	1520	82	1550	83	2	57-111/29		
206-44-0	Fluoranthene	ND	1860	1570	85	1470	79	7	60-110/32		
86-73-7	Fluorene	ND	1860	1520	82	1490	80	2	60-99/30		
118-74-1	Hexachlorobenzene	ND	1860	1420	76	1440	77	1	58-103/27		
87-68-3	Hexachlorobutadiene	ND	1860	1270	68	1270	68	0	49-95/33		
77-47-4	Hexachlorocyclopentadiene	ND	1860	1010	54	1140	61	12	36-94/41		
67-72-1	Hexachloroethane	ND	1860	1120	60	1080	58	4	44-89/38		
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1860	1280	69	1310	70	2	57-104/33		
78-59-1	Isophorone	ND	1860	1120	60	1110	60	1	58-97/30		
91-57-6	2-Methylnaphthalene	ND	1860	1300	70	1390	75	7	57-103/32		
91-20-3	Naphthalene	ND	1860	1350	73	1330	71	1	54-93/32		
98-95-3	Nitrobenzene	ND	1860	1290	69	1280	69	1	53-92/32		
621-64-7	N-Nitroso-di-n-propylamine	ND	1860	1330	72	1230	66	8	49-94/28		
86-30-6	N-Nitrosodiphenylamine	ND	1860	1380	74	1410	76	2	53-107/28		
85-01-8	Phenanthrene	ND	1860	1520	82	1520	82	0	61-103/32		
129-00-0	Pyrene	ND	1860	1420	76	1520	82	7	58-109/33		
120-82-1	1,2,4-Trichlorobenzene	ND	1860	1250	67	1230	66	2	52-93/32		

CAS No.	Surrogate Recoveries	MS	MSD	F70154-14	Limits
367-12-4	2-Fluorophenol	79%	78%	85%	40-102%
4165-62-2	Phenol-d5	80%	76%	85%	41-100%
118-79-6	2,4,6-Tribromophenol	81%	82%	82%	42-108%
4165-60-0	Nitrobenzene-d5	70%	74%	75%	40-105%
321-60-8	2-Fluorobiphenyl	69%	74%	75%	43-107%
1718-51-0	Terphenyl-d14	74%	79%	78%	45-119%



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Section 6

GC Volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV2134-MB	UV037145.D1		12/17/09	AH	n/a	n/a	GUV2134

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-1, F70154-2

6.1.1
6

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	3800	2000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	2800	1500	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1000	510	ug/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	BFB	103%
460-00-4	BFB	84%

Method Blank Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV2135-MB	UV037166.D1		12/21/09	AH	n/a	n/a	GUV2135

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-3, F70154-4, F70154-7, F70154-8, F70154-14

6.1.2
6

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	3800	2000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	2800	1500	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1000	510	ug/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	BFB	100%
460-00-4	BFB	85%

Method Blank Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV2136-MB	UV037193.D1		12/22/09	AH	n/a	n/a	GUV2136

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-5, F70154-6, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-15

6.1.3
6

CAS No.	Compound	Result	RL	MDL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	3800	2000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	2800	1500	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1000	510	ug/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	BFB	98%
460-00-4	BFB	83%

Blank Spike Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV2134-BS	UV037144.D1		12/17/09	AH	n/a	n/a	GUV.2134

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-1, F70154-2

6.2.1
6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	C5- C8 Aliphatics (Unadj.)	25000	23900	96	70-130
	C9- C12 Aliphatics (Unadj.)	25000	26700	107	70-130
	C9- C10 Aromatics (Unadj.)	4160	4520	109	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	BFB	121%	70-130%
460-00-4	BFB	100%	70-130%

Blank Spike Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV2135-BS	UV037165.D1		12/21/09	AH	n/a	n/a	GUV2135

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-3, F70154-4, F70154-7, F70154-8, F70154-14

6.2.2
6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	C5- C8 Aliphatics (Unadj.)	25000	21900	88	70-130
	C9- C12 Aliphatics (Unadj.)	25000	26000	104	70-130
	C9- C10 Aromatics (Unadj.)	4160	4460	107	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	BFB	114%	70-130%
460-00-4	BFB	97%	70-130%

Blank Spike Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV2136-BS	UV037192.D1		12/22/09	AH	n/a	n/a	GUV2136

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-5, F70154-6, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	C5- C8 Aliphatics (Unadj.)	25000	24800	99	70-130
	C9- C12 Aliphatics (Unadj.)	25000	27400	110	70-130
	C9- C10 Aromatics (Unadj.)	4160	4730	114	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	BFB	118%	70-130%
460-00-4	BFB	104%	70-130%

6.2.3
6

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70119-1MS	UV037159.D1		12/18/09	AH	n/a	n/a	GUV2134
F70119-1MSD	UV037160.D1		12/18/09	AH	n/a	n/a	GUV2134
F70119-1	UV037147.D1		12/17/09	AH	n/a	n/a	GUV2134

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-1, F70154-2

6.3.1
6

CAS No.	Compound	F70119-1		Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
		ug/kg	Q							
	C5- C8 Aliphatics (Unadj.)	ND		26000	25000	96	22600	87	10	70-130/50
	C9- C12 Aliphatics (Unadj.)	ND		26000	27600	106	25700	99	7	70-130/50
	C9- C10 Aromatics (Unadj.)	ND		4330	4710	109	4310	100	9	70-130/50
CAS No.	Surrogate Recoveries	MS	MSD	F70119-1		Limits				
460-00-4	BFB	115%	108%	116%		70-130%				
460-00-4	BFB	95%	90%	93%		70-130%				

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70154-4MS	UV037186.D1		12/21/09	AH	n/a	n/a	GUV2135
F70154-4MSD	UV037187.D1		12/21/09	AH	n/a	n/a	GUV2135
F70154-4	UV037168.D1		12/21/09	AH	n/a	n/a	GUV2135

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-3, F70154-4, F70154-7, F70154-8, F70154-14

6.3.2
6

CAS No.	Compound	F70154-4		Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
		ug/kg	Q							
	C5- C8 Aliphatics (Unadj.)	ND		26900	26500	99	26100	97	2	70-130/50
	C9- C12 Aliphatics (Unadj.)	ND		26900	28700	107	30100	112	5	70-130/50
	C9- C10 Aromatics (Unadj.)	ND		4480	5290	118	5160	115	2	70-130/50

CAS No.	Surrogate Recoveries	MS	MSD	F70154-4	Limits
460-00-4	BFB	113%	110%	108%	70-130%
460-00-4	BFB	99%	97%	91%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70154-10MS	UV037206.D1		12/22/09	AH	n/a	n/a	GUV2136
F70154-10MSD	UV037207.D1		12/22/09	AH	n/a	n/a	GUV2136
F70154-10	UV037196.D1		12/22/09	AH	n/a	n/a	GUV2136

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-5, F70154-6, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-15

CAS No.	Compound	F70154-10		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
	C5- C8 Aliphatics (Unadj.)	ND		32200	28700	89	28600	89	0	70-130/50
	C9- C12 Aliphatics (Unadj.)	ND		32200	35400	110	35600	111	1	70-130/50
	C9- C10 Aromatics (Unadj.)	ND		5360	6560	122	6470	121	1	70-130/50
CAS No.	Surrogate Recoveries	MS		F70154-10		Limits				
460-00-4	BFB		108%		107%		98%		70-130%	
460-00-4	BFB		93%		94%		84%		70-130%	

6.3.3

6

Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F69798-4RDUP	UV037158.D1		12/18/09	AH	n/a	n/a	GUV2134
F69798-4R	UV037156.D1		12/18/09	AH	n/a	n/a	GUV2134

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-1, F70154-2

6.1
6

CAS No.	Compound	F69798-4R		DUP		Q	RPD	Limits
		ug/kg	ug/kg	ug/kg	ug/kg			
	C5- C8 Aliphatics (Unadj.)	ND		ND		nc		30 ^a
	C9- C12 Aliphatics (Unadj.)	ND		ND		nc		30 ^a
	C9- C10 Aromatics (Unadj.)	ND		ND		nc		30 ^a

CAS No.	Surrogate Recoveries	DUP		F69798-4R		Limits
		Q	RPD	Q	RPD	
460-00-4	BFB	114%		112%		70-130%
460-00-4	BFB	92%		91%		70-130%

(a) Advisory control limits.

Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70154-3DUP	UV037185.D1		12/21/09	AH	n/a	n/a	GUV2135
F70154-3	UV037167.D1		12/21/09	AH	n/a	n/a	GUV2135

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-3, F70154-4, F70154-7, F70154-8, F70154-14

6.4.2
6

CAS No.	Compound	F70154-3		DUP		RPD	Limits
		ug/kg	Q	ug/kg	Q		
	C5- C8 Aliphatics (Unadj.)	80200		75600		6	30 ^a
	C9- C12 Aliphatics (Unadj.)	141000		115000		20	30 ^a
	C9- C10 Aromatics (Unadj.)	109000		85700		24	30 ^a

CAS No.	Surrogate Recoveries	DUP	F70154-3		Limits
460-00-4	BFB	109%	116%	70-130%	
460-00-4	BFB	116%	118%	70-130%	

(a) Advisory control limits.

Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: HESNCR Highlands Environmental Solutions, Inc

Project: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F70154-5DUP	UV037204.D1		12/22/09	AH	n/a	n/a	GUV2136
F70154-5	UV037194.D1		12/22/09	AH	n/a	n/a	GUV2136

The QC reported here applies to the following samples:

Method: MADEP VPH

F70154-5, F70154-6, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-15

CAS No.	Compound	F70154-5		DUP		RPD	Limits
		ug/kg	Q	ug/kg	Q		
	C5- C8 Aliphatics (Unadj.)	ND		ND		nc	30 a
	C9- C12 Aliphatics (Unadj.)	ND		ND		nc	30 a
	C9- C10 Aromatics (Unadj.)	498	J	ND		200*	30 a

CAS No.	Surrogate Recoveries	DUP	F70154-5	Limits
460-00-4	BFB	107%	119%	70-130%
460-00-4	BFB	92%	96%	70-130%

(a) Advisory control limits.



Metals Analysis

QC Data Summaries

7

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F70154
Account: HESNCR - Highlands Environmental Solutions, Inc
Project: S7001; Durham, NC

QC Batch ID: MP17488
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 12/16/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	9.4	.52	.94		
Antimony	2.8	.21	.23		
Arsenic	0.38	.17	.17		
Barium	9.4	.24	.47		
Beryllium	0.24	.047	.094		
Cadmium	0.19	.047	.047		
Calcium	240	4.7	4.7		
Chromium	0.47	.075	.075		
Cobalt	2.4	.039	.039		
Copper	1.2	.099	.099		
Iron	4.7	1.1	1.2		
Lead	4.7	.094	.21	0.090	<4.7
Magnesium	240	4.7	4.7		
Manganese	0.71	.024	.024		
Molybdenum	2.4	.13	.13		
Nickel	1.9	.11	.15		
Potassium	470	4.7	4.7		
Selenium	4.7	.15	.15		
Silver	0.47	.057	.057		
Sodium	470	24	39		
Thallium	0.47	.16	.16		
Tin	2.4	.13	.34		
Vanadium	2.4	.031	.031		
Zinc	0.94	.18	.18		

Associated samples MP17488: F70154-1, F70154-2, F70154-3, F70154-4, F70154-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F70154
 Account: HESNCR - Highlands Environmental Solutions, Inc
 Project: S7001; Durham, NC

QC Batch ID: MP17488
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date:

12/16/09

12/16/09

Metal	F70154-1 Original DUP	RPD	QC Limits	F70154-1 Original MS	Spikelot MPFLICP1	% Rec	QC Limits
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Aluminum

Antimony

Arsenic

Barium anr

Beryllium

Cadmium

Calcium

Chromium anr

Cobalt

Copper

Iron

Lead	3.1	2.5	21.4 (a) 0-20	3.1	19.7	25.4	65.4N(b) 80-120
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Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Tin

Vanadium

Zinc

Associated samples MP17488: F70154-1, F70154-2, F70154-3, F70154-4, F70154-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

7.12
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F70154
 Account: HESNCR - Highlands Environmental Solutions, Inc
 Project: S7001; Durham, NC

QC Batch ID: MP17488
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 12/16/09

Metal	F70154-1 Original MSD	Spikelot MPFLICP1 % Rec	MSD RPD	QC Limit
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Aluminum

Antimony

Arsenic

Barium anr

Beryllium

Cadmium

Calcium

Chromium anr

Cobalt

Copper

Iron

Lead	3.1	16.6	20.9	64.6N(a)	17.1	20
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Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Tin

Vanadium

Zinc

Associated samples MP17488: F70154-1, F70154-2, F70154-3, F70154-4, F70154-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

7.1.2
7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F70154
 Account: HESNCR - Highlands Environmental Solutions, Inc
 Project: S7001; Durham, NC

QC Batch ID: MP17488
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date:

12/16/09

Metal	BSP Result	Spikelot MPFLICP1	% Rec	QC Limits
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Aluminum

Antimony

Arsenic

Barium anr

Beryllium

Cadmium

Calcium

Chromium anr

Cobalt

Copper

Iron

Lead 24.0 22.9 104.6 80-120

Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Tin

Vanadium

Zinc

Associated samples MP17488: F70154-1, F70154-2, F70154-3, F70154-4, F70154-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

7.1.3
7

SERIAL DILUTION RESULTS SUMMARY

Login Number: F70154
Account: HESNCR - Highlands Environmental Solutions, Inc
Project: S7001; Durham, NC

QC Batch ID: MP17488
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/16/09

Metal	F70154-1 Original SDL 1:5	QC %DIF	Limits
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Aluminum

Antimony

Arsenic

Barium anr

Beryllium

Cadmium

Calcium

Chromium anr

Cobalt

Copper

Iron

Lead 60.2 92.5 53.7 (a) 0-10

Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Tin

Vanadium

Zinc

Associated samples MP17488: F70154-1, F70154-2, F70154-3, F70154-4, F70154-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F70154
Account: HESNCR - Highlands Environmental Solutions, Inc
Project: S7001; Durham, NC

QC Batch ID: MP17489
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 12/16/09.

Metal	RL	IDL	MDL	MB raw	final
Aluminum	7.7	.42	.77		
Antimony	2.3	.17	.18		
Arsenic	0.31	.14	.14		
Barium	7.7	.19	.38		
Beryllium	0.19	.038	.077		
Cadmium	0.15	.038	.038		
Calcium	190	3.8	3.8		
Chromium	0.38	.062	.062		
Cobalt	1.9	.032	.032		
Copper	0.96	.081	.081		
Iron	3.8	.88	1		
Lead	3.8	.077	.17	0.059	<3.8
Magnesium	190	3.8	3.8		
Manganese	0.58	.019	.019		
Molybdenum	1.9	.11	.11		
Nickel	1.5	.088	.12		
Potassium	380	3.8	3.8		
Selenium	3.8	.12	.12		
Silver	0.38	.046	.046		
Sodium	380	19	32		
Thallium	0.38	.13	.13		
Tin	1.9	.11	.28		
Vanadium	1.9	.025	.025		
Zinc	0.77	.15	.15		

Associated samples MP17489: F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F70154
 Account: HESNCR - Highlands Environmental Solutions, Inc
 Project: S7001; Durham, NC

QC Batch ID: MP17489
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date:

12/16/09

12/16/09

Metal	F70067-1 Original DUP	RPD	QC Limits	F70067-1 Original MS	Spikelot MPFLICP1	% Rec	QC Limits
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Aluminum

Antimony

Arsenic

Barium

Beryllium

Cadmium

Calcium

Chromium

Cobalt

Copper

Iron

Lead

46.8 42.3 10.1 0-20 46.8 68.9 30.5 72.4N(a) 80-120

Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Tin

Vanadium

Zinc

Associated samples MP17489: F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12,
 F70154-13, F70154-14, F70154-15

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

7.2.2

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F70154
 Account: HESNCR - Highlands Environmental Solutions, Inc
 Project: S7001; Durham, NC

QC Batch ID: MP17489
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 12/16/09

Metal	F70067-1 Original MSD	Spikelot MPFLICP1 % Rec	MSD RPD	QC Limit
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Aluminum

Antimony

Arsenic

Barium

Beryllium

Cadmium

Calcium

Chromium

Cobalt

Copper

Iron

Lead	46.8	62.3	30	51.7N(a), 10.1	20
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Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Tin

Vanadium

Zinc

Associated samples MP17489: F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

7.2.2
7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F70154
 Account: HESNCR - Highlands Environmental Solutions, Inc
 Project: S7001; Durham, NC

QC Batch ID: MP17489
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date:

12/16/09

Metal	BSP Result	Spikelot MPFLICP1	QC % Rec	QC Limits
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Aluminum

Antimony

Arsenic

Barium

Beryllium

Cadmium

Calcium

Chromium

Cobalt

Copper

Iron

Lead 21.5 20.8 103.2 80-120

Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Tin

Vanadium

Zinc

Associated samples MP17489: F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

7.2.3

7

SERIAL DILUTION RESULTS SUMMARY

Login Number: F70154
Account: HESNCR - Highlands Environmental Solutions, Inc
Project: S7001; Durham, NC

QC Batch ID:

MP17489

Methods: SW846 6010B

Matrix Type: SOLID

Units: ug/l

Prep Date:

12/16/09

Metal	F70067-1 Original SDL 1:5	%DIF	QC Limits
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Aluminum

Antimony

Arsenic

Barium

Beryllium

Cadmium

Calcium

Chromium

Cobalt

Copper

Iron

Lead 825 1490 80.3*(a) 0-10

Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Tin

Vanadium

Zinc

Associated samples MP17489: F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Serial dilution indicates possible matrix interference.

7.2.4

7



IT'S ALL IN THE CHEMISTRY

Section 8

GC Semi-volatiles

QC Data Summaries

(Accutest Labs of New England, Inc.)



Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: F70154

Account: ALSE Accutest Laboratories Southeast, Inc.

Project: HESNCR: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20222-MB	BG13519.D	1	12/20/09	WZ	12/18/09	OP20222	GBG438

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

8.1.1
8

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	17000	17000	ug/kg	
	C9-C18 Aliphatics	ND	8700	8700	ug/kg	
	C19-C36 Aliphatics	ND	8700	8700	ug/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 40-140%
321-60-8	2-Fluorobiphenyl	68% 40-140%
580-13-2	2-Bromonaphthalene	56% 40-140%
3386-33-2	1-Chlorooctadecane	54% 40-140%

Method Blank Summary

Page 1 of 1

Job Number: F70154

Account: ALSE Accutest Laboratories Southeast, Inc.

Project: HESNCR: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20292-MB	BG13709.D	1	12/29/09	WZ	12/29/09	OP20292	GBG445

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

F70154-12

CAS No.	Compound	Result	RL	MDL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	17000	17000	ug/kg	
	C9-C18 Aliphatics	ND	8500	8500	ug/kg	
	C19-C36 Aliphatics	ND	8500	8500	ug/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	102%
321-60-8	2-Fluorobiphenyl	106%
580-13-2	2-Bromonaphthalene	112%
3386-33-2	1-Chlorooctadecane	64%

8.1.2
C8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: ALSE Accutest Laboratories Southeast, Inc.

Project: HESNCR: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20222-BS	BG13520.D	1	12/20/09	WZ	12/18/09	OP20222	GBG438
OP20222-BSD	BG13521.D	1	12/20/09	WZ	12/18/09	OP20222	GBG438

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	71000	74200	105	72300	100	3	40-140/25
	C9-C18 Aliphatics	26600	19600	74	19400	72	1	40-140/25
	C19-C36 Aliphatics	35500	31200	88	33500	93	7	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	66%	40-140%
321-60-8	2-Fluorobiphenyl	60%	58%	40-140%
580-13-2	2-Bromonaphthalene	45%	45%	40-140%
3386-33-2	1-Chlorooctadecane	55%	54%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough Limit
OP20222-BS	2-Methylnaphthalene	2330	76.8	3.2% 5.0
OP20222-BS	Naphthalene	2350	98.5	4.0% 5.0
OP20222-BSD	2-Methylnaphthalene	2260	7.5	0.3% 5.0
OP20222-BSD	Naphthalene	2290	29.0	1.3% 5.0

8.2.1
8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: ALSE Accutest Laboratories Southeast, Inc.

Project: HESNCR: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20292-BS	BG13711.D	1	12/29/09	WZ	12/29/09	OP20292	GBG445
OP20292-BSD	BG13712.D	1	12/29/09	WZ	12/29/09	OP20292	GBG445

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

F70154-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	72100	93400	130	87100	127	7	40-140/25
	C9-C18 Aliphatics	27000	21500	80	20100	78	7	40-140/25
	C19-C36 Aliphatics	36000	33500	93	31900	93	5	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	98%	94%	40-140%
321-60-8	2-Fluorobiphenyl	101%	95%	40-140%
580-13-2	2-Bromonaphthalene	104%	106%	40-140%
3386-33-2	1-Chlorooctadecane	65%	58%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough Limit
OP20292-BS	2-Methylnaphthalene	4180	1.2	0.0%
OP20292-BS	Naphthalene	3900	42.9	1.1%
OP20292-BSD	2-Methylnaphthalene	3790	1.7	0.0%
OP20292-BSD	Naphthalene	3430	20.7	0.6%

8.2.2

8

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: ALSE Accutest Laboratories Southeast, Inc.

Project: HESNCR: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20222-MS	BG13522.D	1	12/20/09	WZ	12/18/09	OP20222	GBG438
OP20222-MSD	BG13523.D	1	12/20/09	WZ	12/18/09	OP20222	GBG438
M88087-2	BG13526.D	1	12/20/09	WZ	12/18/09	OP20222	GBG438

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

F70154-1, F70154-2, F70154-3, F70154-4, F70154-5, F70154-6, F70154-7, F70154-8, F70154-9, F70154-10, F70154-11, F70154-12, F70154-13, F70154-14, F70154-15

CAS No.	Compound	M88087-2		Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	8.3.1 
		ug/kg	Q								
	C11-C22 Aromatics (Unadj.)	3000000	79500	3160000	201* ^a	3100000	128	2	40-140/25		
	C9-C18 Aliphatics	3480000	29800	3690000	705* ^a	3640000	545* ^a	1	40-140/25		
	C19-C36 Aliphatics	2550000	39700	2130000	-1057* ^a	2070000	-1227* ^a 3		40-140/25		

CAS No.	Surrogate Recoveries	MS	MSD	M88087-2	Limits
84-15-1	o-Terphenyl	330%* ^b	430%* ^b	368%* ^b	40-140%
321-60-8	2-Fluorobiphenyl	157%* ^b	181%* ^b	159%* ^b	40-140%
580-13-2	2-Bromonaphthalene	140%	185%* ^b	81%	40-140%
3386-33-2	1-Chlorooctadecane	117%	185%* ^b	136%	40-140%

(a) Variability of recovery may be due to sample matrix/homogeneity.

(b) Outside control limits due to possible matrix interference.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: F70154

Account: ALSE Accutest Laboratories Southeast, Inc.

Project: HESNCR: S7001; Durham, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20292-MS	BG13713.D	1	12/29/09	WZ	12/29/09	OP20292	GBG445
OP20292-MSD	BG13714.D	1	12/29/09	WZ	12/29/09	OP20292	GBG445
F70331-2	BG13716.D	1	12/29/09	WZ	12/29/09	OP20292	GBG445

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

F70154-12

CAS No.	Compound	F70331-2		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD	8.3.2
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%			
	C11-C22 Aromatics (Unadj.)	ND		76000	90700	119	105000	137	15	40-140/25	CO
	C9-C18 Aliphatics	ND		28500	17300	61	20000	70	14	40-140/25	
	C19-C36 Aliphatics	ND		38000	31000	82	160000	418* a	135* a	40-140/25	
CAS No.	Surrogate Recoveries	MS	MSD	F70331-2		Limits					
84-15-1	o-Terphenyl	87%	88%			40-140%					
321-60-8	2-Fluorobiphenyl	100%	106%			40-140%					
580-13-2	2-Bromonaphthalene	105%	116%			40-140%					
3386-33-2	1-Chlorooctadecane	58%	49%			40-140%					

(a) Variability of recovery may be due to sample matrix/homogeneity.